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ABSTRACT

This guide, developed through the Consortium to Restructure Education through Academic and Technological Excellence (CREATE), a partnership among high schools, a vocational-technical center, a community college, and universities in Oklahoma, presents information, resources, and examples for development and implementation of a tech prep program in the state. The integration of academic and vocational training enhances the high school student's opportunity for employment upon graduation from high school and provides articulation toward a certificate or a two-year degree. CREATE's 4+2+2 plan encourages students to pursue the 4-year baccalaureate degree if their career choice requires it. The guide is organized in 12 sections that cover the following topics: (1) introduction (definition of tech prep and rationale for it); (2) the development and functioning of CREATE; (3) curriculum development; (4) articulation, including steps for successful articulation and a sample articulation plan; (5) staff development; (6) business and industry collaboration and partnership models; (7) guidance and counseling, including a counselor handbook; (8) marketing; (9) implementation steps; (10) program evaluation; (11) several local, state, and federal resources; and (12) a nine-item bibliography. (KC)

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ED 367 895

CREATE'S TECH PREP IMPLEMENTATION GUIDE

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CREATE'S 4+2+2

Deer Creek • Edmond

Western Heights • Putnam City

Francis Tuttle Vo-Tech Center

Oklahoma City Community College

University of Central Oklahoma

University of Oklahoma

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The contents of this guide were developed under a grant from the Department of Education. However, these contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.

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September, 1993

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Tech Prep... Pathways to a Promising Future...

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INTRODUCTION

WHAT IS TECH PREP

Tech Prep (Technology Preparation) is a national educational initiative which prepares students for emerging, technologically advanced careers. It includes a rigorous and focused course of study which provides students with essential academic and technical foundations which prepare students with necessary workplace skills. Under Carl Perkins Title III Tech Prep must:

* lead to an associate degree or two-year certificate.

* provide technical preparation in at least one field of engineering technology; applied science; mechanical, industrial or practical art or trade; or agriculture, health or business.

* build student competencies in mathematics, science and communications through a sequential course of study.

* lead to employment placement.

The seven required elements include:

* Articulation
* Appropriate curriculum design
* Curriculum development
* In-service teacher training
* Counseling training
* Equal access for special populations
* Preparatory services

TECH PREP'S MISSION AND VISION

Tech Prep is an industry and education partnership that is committed to providing a highly trained and motivated work force, prepared to pursue lifelong learning in a changing technological society. It provides occupational pathways for students by preparing them for technologically advanced careers and post-secondary education. By emphasizing strong academic, technical, problem-solving and critical-thinking skills, Tech Prep prepares students for the world of work and helps maintain a quality life in a changing society.

CONSORTIUM AUTONOMY

It is important that each consortium or district customize Tech Prep for its local situation. The local community knows best what skills are needed and opportunities available. Issues to be considered are student population, recruitment and selection; teacher certification; school/college calendars; evaluation; work experience; school/college articulation agreements; and local funding sources.

THE TECH PREP MARKET

A four-year college education has traditionally been thought of as the ticket to high-paying jobs which are in demand. However, according to the U.S. 1990 Census, only 20 percent of the jobs available through the year 2000 will require a four-year college degree or above.

The remaining 80 percent of our future job market will need post-secondary training or education, but not a four-year degree. Since only 30 percent are pursuing education beyond high school, it is easy to see our "skill shortage". In other words, only about 30 percent of our workforce is qualified for 80 percent of all new jobs. Tech Prep is designed to address the remaining 50 percent who have no training or education for future employment. It is through the Tech Prep pathway that we provide these students with academic and technical education that will develop into life-long learning and skill development (1).

BASIC SKILLS EMPLOYEES NEED (2)

* Knowing how to learn
* Listening
* Reading
* Problem solving
* Writing
* Creative thinking
* Mathematics
* Self-confidence
* Oral Communication
* Motivation/Goal setting
* Personal/Career development
* Interpersonal skills
* Negotiation
* Teamwork
* Organizational effectiveness
* Leadership

TECH PREP, THE "WIN-WIN" EXPERIENCE

Students are the big winners! They will develop sound basic skills and knowledge while obtaining a first-rate technical education. They will develop the competence to be able to cope with a fast-changing modern life, and do that with confidence.

Employers win by obtaining a better educated worker than ever before. And skilled worker shortages will be alleviated as the Tech Prep/Associate Degree program becomes widely operational across the country in high schools and colleges.

High schools win because more students will stay in school to complete their high school education, and more students will find satisfaction in their courses of study. The tone and morale of the high school will improve as more students find themselves engaged in a purposeful and substantial educational program.

Colleges of all kinds win because entering students will be better prepared. Because colleges will spend less on remedial and developmental education programs, they will be able to spend more on increasingly sophisticated technical programs. In addition, colleges will be able to meet the needs of students by eliminating duplication of course offerings.

Communities and states win because cooperation at different levels of education will eliminate program duplication, provide for greater efficiency and more fully develop the human resources of each region.

America certainly wins by the development of a world-class workforce that will outwork, outproduce and outsmart the competition. The greatest resource in our nation -- the human resource -- will be more fully developed than ever in our history (3).

CREATE

The Consortium to Restructure Education through Academic and Technological Excellence

CREATE'S EVOLUTION

The federal government has become increasingly concerned with the future economic and technological competitiveness of the United States in the international marketplace. *America's Choice: High Skills or Low Wages* reports the present lack of clear standards of achievement and the irrelevancy of school work to the world of work as the two major factors in the failure to produce a highly-educated workforce.

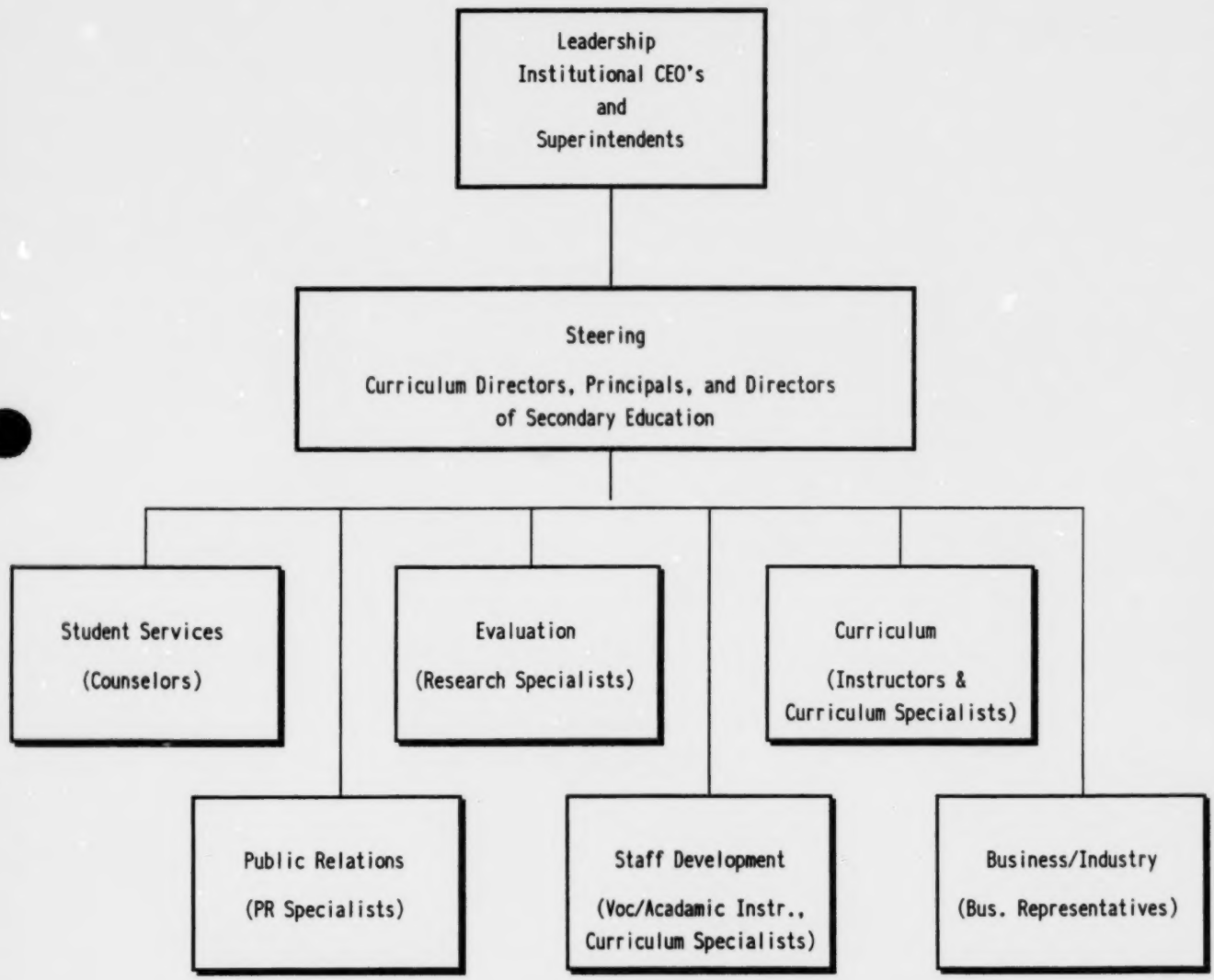
These facts, in addition to low student scores on most international tests and high school dropout rates have brought attention to the fact that we must transform America's schools. As a result of these concerns, in the Carl D. Perkins Vocational and Applied Technology Act of 1990, the U.S. Congress authorized the government to spend up to $125 million on Tech Prep programs. Aside from basic state grant money, Tech Prep received the largest share of funds of any specific program described in the law (4).

It was under this 3-year grant that CREATE was formed July 1, 1991, with Francis Tuttle Vo-Tech Center as the managing agent. Combining secondary and post-secondary institutions, CREATE focused on career counseling, applied academics, curriculum articulation, and a partnership between education and business. The design focuses on strong local roots, tailored to our local opportunities and limitations. The four participating school districts enroll 8,000 students, grades 9 through 12. As we begin our third year, approximately 1,300 students are enrolled in the Tech Prep process. At the end of this section is a flow chart depicting CREATE's position in the Oklahoma Tech Prep structure.

In January of 1993, CREATE was recognized by the U. S. Department of Education as one of eight Federal Project Demonstration Sites. As a result, the consortium was awarded a $359,502 grant to support evaluation, dissemination and assistance to others in replicating the CREATE model.

CREATE'S ORGANIZATIONAL STRUCTURE

Planning and operation of Tech Prep is done through a committee structure. Following is an organizational chart depicting the committees and their members. Duties and responsibilities of these committees appear in the Implementation Section of this Guide.



AN OVERVIEW

CREATE begins the Tech Prep process with career awareness education in grades kindergarten through eighth grade. These students are exposed to a variety of careers through classroom activities, guest speakers, videos and classroom materials. The focus here is to give the students a broader view of career opportunities. In addition, at the eighth grade level students are given the Career Occupational Preference Survey (COPS). This survey defines the student's career interest in broad areas. When these occupational clusters are identified, students are given additional information and career counseling regarding specific occupations within the cluster.

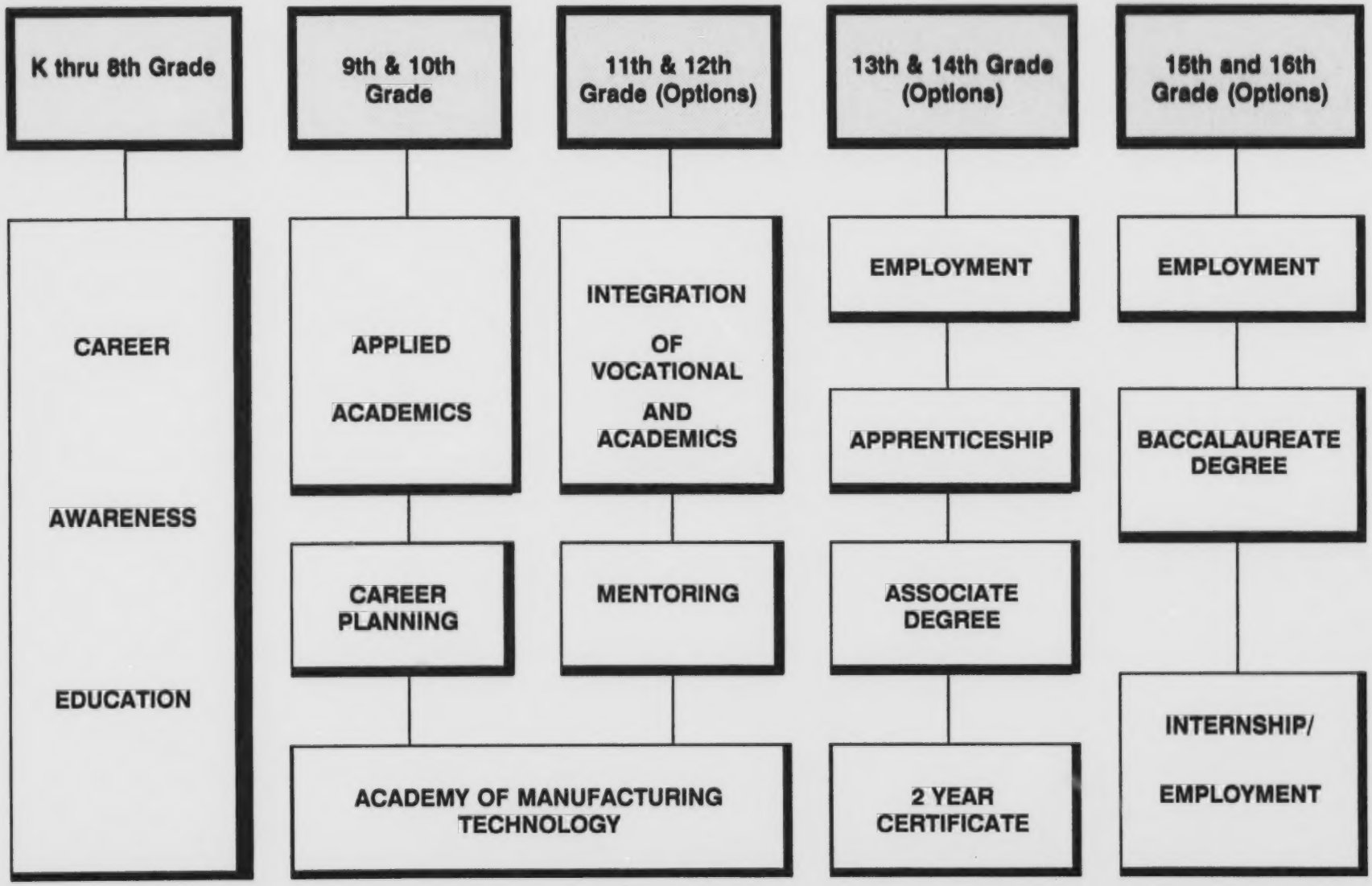
During ninth grade, students are introduced to the applied academic courses in math, science and communication that align with their chosen career cluster. They also have available to them a tentative six-year plan of study that outlines the appropriate educational pathway.

Eleventh and twelfth grade students have the option of including vocational courses in their high school curriculum. This integration of academic and vocational training enhances the student's opportunity for employment upon graduation from high school and provides articulation toward a certificate or a two-year associate degree. Senior students can also participate in business internships through their vocational classes. The internships may extend through post-secondary study or lead to full time employment.

CREATE's 4 + 2 + 2 plan encourages students to pursue the four-year baccalaureate degree if their career choice requires it. Whatever the student's occupational plan, the Tech Prep consortium provides a smooth pathway of career awareness, exploration and preparation. Rigorous academics are combined with hands-on vocational training. Career assessment and guidance are included, along with mentoring, internships, and articulation of coursework. The design is intended to produce a highly trained and motivated individual who is prepared to pursue lifelong learning in our changing technological world.

CREATE'S 4 + 2 + 2

Consortium to Restructure Education through Academic and Technological Excellence



THE ROLE OF CREATE

CREATE was formed by the Edmond, Western Heights, Deer Creek and Putnam City school districts in cooperation with Francis Tuttle Vo-Tech Center, Oklahoma City Community College, the University of Central Oklahoma and the University of Oklahoma. These districts are located in Edmond, suburbia Oklahoma City or within the City. The socioeconomic status varies from very low to very high.

Our goal is to bring together the resources of educators -- academic, vocational, secondary, and post-secondary -- with business, industry, labor, students, parents, and communities at large, to educate students to compete in a technologically advanced world.

CREATE's 4 + 2 + 2 career pathway focuses on 4 years in high school (with or without technical education), plus 2 years of education after high school, plus 2 years of education at a baccalaureate-granting university. Students may exit at any point with skills which will allow them a greater capacity for employment and greater opportunities for upward mobility within the job market.

As a demonstration site, we are available to assist Tech Prep consortia with these services:

* on-site observation of CREATE's Tech Prep classrooms
* on-site consultation with CREATE's staff and other involved personnel
* descriptive program and curriculum materials
* telephone consultation
* visits to consortia project sites
* evaluation data as it becomes available

TO REQUEST INFORMATION OR SCHEDULE A VISIT

At least two weeks notice is required to schedule a visit, contingent on site availability. Obviously there will be scheduling restrictions regarding on-site observation of classrooms and consultation with staff. The number of visitors may be limited, depending on site capacity. Representatives might include students, teachers, counselors, school administrators, and post-secondary personnel.

All requests for information or visits must be made through Francis Tuttle Vo-Tech Center. Contact:

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Federal Tech Prep Project Director
Francis Tuttle Vo-Tech Center
12777 N. Rockwell
Oklahoma City, OK 73142-2789
405 720-4380
Fax 405 720-4790

Carol Adams
Tech Prep Specialist
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12777 N. Rockwell
Oklahoma City, OK 73142-2789
405 720-4268
Fax 405 720-4790

CREATE'S PARTICIPATING SCHOOLS

Deer Creek High School
Route 1, Box 137
Edmond, Oklahoma 73003
405 348-5720

Edmond Memorial High School
1000 S.E. 15th Street
Edmond, Oklahoma 73034
405 340-2850

Edmond North High School
215 W. Danforth
Edmond, Oklahoma 73003
405 340-2875

Edmond Santa Fe High School
1901 S.W. 15th Street
Edmond, Oklahoma 73013
405 340-2230

Edmond Central Mid-High
500 E. Ninth
Edmond, Oklahoma 73034
405 340-2890

Putnam City High School
5300 N.W. 50th Street
Oklahoma City, Oklahoma 73122
405 789-4350

Putnam City North High School
11800 N. Rockwell
Oklahoma City, Oklahoma 73132
405 722-4220

Putnam City West High School
8500 N.W. 23rd Street
Oklahoma City, Oklahoma 73127
405 787-1140

Western Heights High School
8201 S.W. 44th Street
Oklahoma City, Oklahoma 73179
405 745-4623

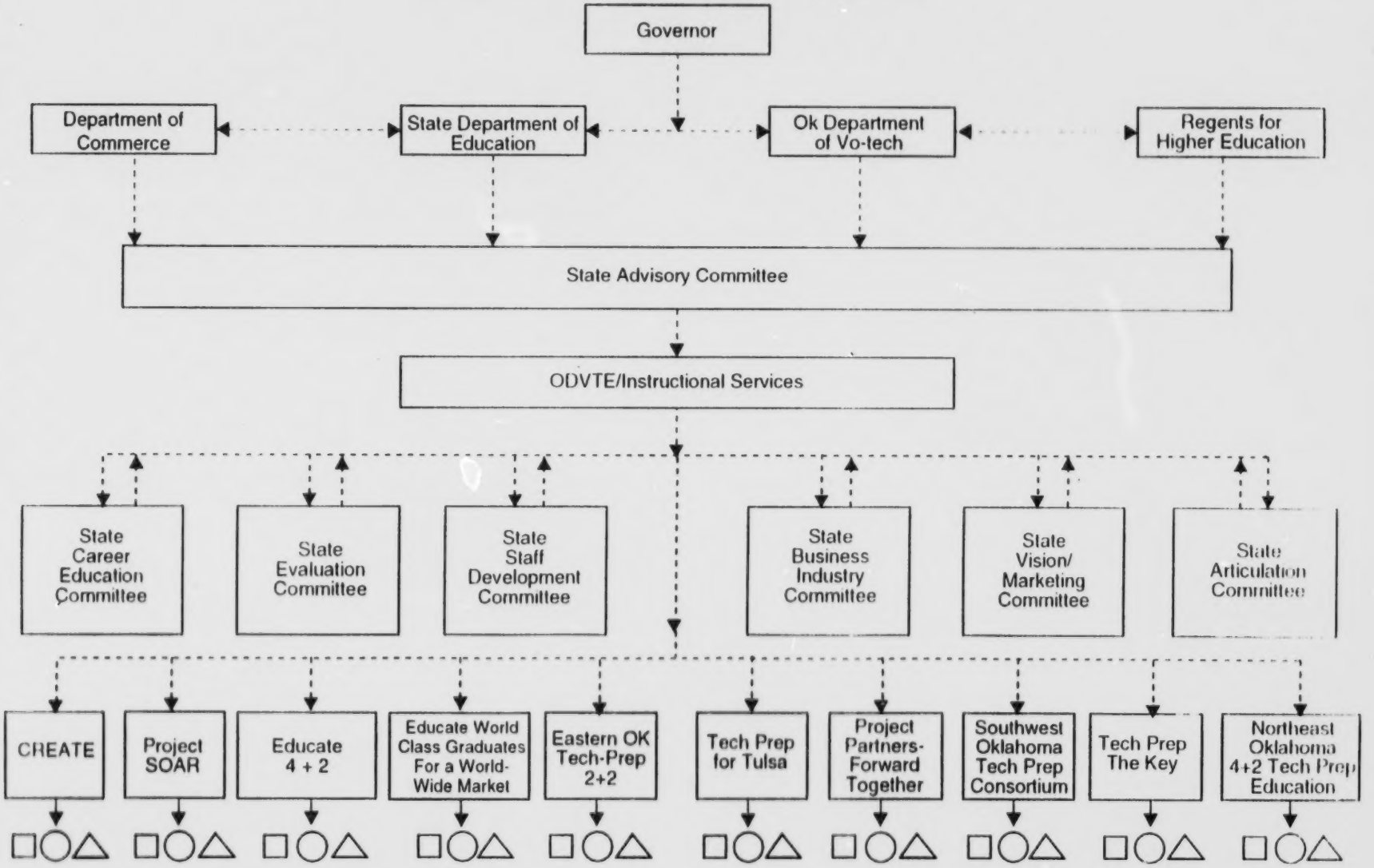
Francis Tuttle Vo-Tech Center
12777 N. Rockwell
Oklahoma City, Oklahoma 73142
405 722-7799

Oklahoma City Community College
7777 South May Avenue
Oklahoma City, Oklahoma 73159
405 682-7544

University of Oklahoma
1000 Asp Avenue
Norman, Oklahoma 73019
405 325-0311

University of Central Oklahoma
100 N. University
Edmond, Oklahoma 73034
405 341-2980

Oklahoma Tech Prep Flow Chart



(□ Teachers/Counselors/Administrators— ○ Students, Parents— △ Business & Industry)

CURRICULUM

CREATE's Tech Prep curriculum integrates academic and vocational/technical disciplines, application-based methods of teaching, cooperative and teamwork learning, and the premise that learner outcomes will be achieved. The Center for Occupational Research and Development (CORD) curriculum is the basis of instruction. Educators modify, evaluate, and develop new curriculum to address essential workplace issues of productivity, teamwork and flexibility. The curriculum is implemented through the following instructional strategies: application-based instruction, cooperative learning and interdisciplinary teaching. These components are discussed in detail in the Guidance and Counseling section.

CURRICULUM REVIEW AND DEVELOPMENT

The Oklahoma State Department of Education has established Oklahoma learner outcomes in math, science, and communication that are tested at given intervals. CREATE's applied academic courses are aligned to meet these outcomes. The academic instructors, within their area of expertise, determine which competencies overlap, are now taught, are not taught, and at what level they should be taught. With appropriate training, the content area experts develop the learning activities for students, with emphasis on hands-on practice. After the competencies have been developed, time is given to modify courses, to review and write curriculum and to develop materials and lesson plans for Tech Prep's new methods.

There are three Tech Prep target areas: Industrial/Engineering Technology, Business and Office Technology, and Health Technology.

ELEMENTS TO CONSIDER:

1. What students are targeted?
2. What skills are needed to make students successful in a career?
3. Which technical career clusters will be presented?
4. What math, science, communications, and social science content is needed by students for successful careers?
5. What basic content coverage, if any, is required for certification?
6. What money is available for equipment, resources, and supplies?
7. What employability level is expected of Tech Prep graduates?
8. What vocational educational resources are available?
9. What workplace educational opportunities exist in the community?

CURRICULUM DOCUMENTS

Various documents relating to curriculum planning and development follow.

PROJECTION
EDMOND PUBLIC SCHOOLS

TECH PREP CLUSTERS AND APPLIED ACADEMICS

ENGINEERING* TECHNOLOGY	HEALTH/HUMAN* SERVICES	BUSINESS*
	HIGH SCHOOL	
9th GRADE	**9TH GRADE**	**9TH GRADE**
Applied Algebra I Physical Science/ Biology AA/Biology	Applied Algebra I Biology AA	Applied Algebra I Physical Science/ Biology AA/Biology
10th GRADE	**10TH GRADE**	**10TH GRADE**
Applied Geometry Physics PT I	Applied Geometry Physics PTI/Elective	Applied Geometry Physics PT I
11th GRADE	**11TH GRADE**	**11TH GRADE**
Algebra II Physics PT II	Algebra II Physics PT II/Elective	Algebra II Physics PT II

Electives: Biology I, Biology II, Chemistry, Physics, Environmental Science, Zoology, Physiology/Anatomy, or as specified at the individual high schools.

FRANCIS TUTTLE VO-TECH CENTER

Auto Collision Technology Auto Service Technology	Allied Health Careers Allied Health Careers II	Applied Accounting Banking and Financial Services Office & Secretarial Microcomputer Applications
Drafting/CAD Fundamentals Electronics Technology Machine Shop	Child Care Food Service Certification	

POST SECONDARY (YEAR 13)

Auto/Aerospace Technician CADD/CAM Technician CNC Machining Technician Instrumentation and Control Technician Microcomputer Technician	Practical Nursing Respiratory Therapy Technician	(Above programs are available as post-secondary)

OKLAHOMA CITY COMMUNITY COLLEGE ASSOCIATE DEGREE PROGRAMS (ARTICULATION WITH FRANCIS TUTTLE)

Industrial Electronics Automated/Aerospace Manufacturing Computer-Aided Design/Drafting Electronics Automotive Technology Manufacturing Technology Microcomputer Support Technology	Pre-Dentistry/Pre-Medicine Emergency Medical Technology Gerontology Technology Health Psychology Nursing Occupational Therapy Assistant Physical Therapist Assistant Pre-Pharmacy Psychology Food Service Management Child Development	Computer Science Office Administration legal secretary office auto. spec. admin. secretary Finance

OKLAHOMA UNIVERSITY BACCALAUREATE DEGREES (ARTICULATION WITH OCCC)

UNIVERSITY OF CENTRAL OKLAHOMA BACCALAUREATE DEGREES (ARTICULATION WITH OCCC)

*The engineering technology, health/human services and business career clusters are three suggested educational pathways for students. However, the Applied Academic Curriculum can be used in other career pathways as an option to the traditional math and science classes.

WESTERN HEIGHTS HIGH SCHOOL

REQUIREMENTS FOR GRADUATION
(44 TOTAL CREDITS NEEDED TO EARN A DIPLOMA)

LANGUAGE ARTS - 9 Credits
ENGLISH 4 Yrs. - 8 Credits

ORAL-COMMUNICATION
(1 Semester) - 1 Credit

SOCIAL STUDIES - 8 Credits
OKLA. HISTORY - 1 Credit
GEOGRAPHY - 1 Credit
AMER. HISTORY - 2 Credits
WORLD HISTORY - 2 Credits
GOVERNMENT - 1 Credit
ECOMONICS - 1 Credit

MATH/SCIENCE (Option 1)
MATHEMATICS - 6 Credits
(2 must be Algebra I)

SCIENCE - 4 Credits
(Laboratory Science)

MATH/SCIENCE (Option 2)
MATHEMATICS - 4 Credits
(2 must be Algebra I)
SCIENCE -6 Credits
(Laboratory Science)

PHYSICAL EDUCATION - 1 Credit
(Participation in band, after school sports, Encore or Finale will fulfill this credit.

HEALTH - 1 Credit

FOUR YEAR TECH PREP PROGRAM

9th GRADE
ENGLISH I
OKLAHOMA HISTORY -One Semester
GEOGRAPHY -One Semester
APPLIED MATH I (TP) Algebra/Geometry
APPLIED BIOLOGY/CHEMISTRYI (TP)
OR PRINCIPLES OF TECHNOLOGY
PHYSICAL EDUC. - One Semester
HEALTH - One Semester
APPLIED COMMUNICATIONS
- One Semester
ELECTIVE - One Semester

10th GRADE
ENGLISH II
AMERICAN HISTORY
APPLIED MATH II (TP)
Algebra /Geometry
APPLIED BIOLOGY/CHEMISTRYII (TP)
OR PRINCIPLES OF TECHNOLOGY II
(TP PHYSICS)
ELECTIVE OF CHOICE
ELECTIVE OF CHOICE

11TH GRADE
ENGLISH III
WORLD HISTORY
ALGEBRA II
VO-TECH 6 CREDITS
(THREE HOURS PER DAY)
Students who choose not to attend
Vo-Tech in the 11th grade could take
12 additional credits at the high school.
The importance of choosing these classes
carefully cannot be over emphasized.

12TH GRADE
ENGLISH IV
GOVERNMENT (One Semester)
ECONOMICS (One Semester)
ELECTIVE OF CHOICE
(Suggest highly Pre-Calculus
or Advanced Science) Vo-Tech
6 credits (3 Hrs. per day)
The Tech Prep Program the Senior
year could be an apprenticeship
program at a business.

TECH PREP CLUSTERS

TRADE/ENGINEERING TECHNOLOGY

Western Heights High School

9th Grade

Applied Algebra I
Principles of Technology I
Applied Communication

10th Grade

Applied Geometry
Principles of Technology II

Francis Tuttle Vo-Tech Center

(Free Enrollment and Transportation for 11th and 12 grades)

(A1) Auto Collision Technology (2 yr)
(A1) Auto Service Technology (2 yr)

* (B1) Drafting/CAD Fundamentals (1 yr)
(C1) Electronics Technology
(D1) Machine Shop (2 yr)

Post-Secondary (Year 13)
(Enrollment Fee)

(C2) Auto/Aerospace Technician
* (B2) CADD/CAM Technician
(D2) CNC Machining Technician
(C2) Instrumentation and Control Technician
(C2) Microcomputer Technician

Oklahoma City Community College

Associate Degree Program

(C3) Industrial Electronics
(C3) Automated/Aerospace Manufacturing
* (B3) Computer-Aided Design/Drafting
(C3) Electronics
(A2) Automotive Technology
(D2, C3) Manufacturing Technology
(C3) Microcomputer Support Technology

*Indicates alphabetic/numeric sequence path for Associates Degree.

HEALTH/HUMAN SERVICES

Western Heights High School

9th Grade

Applied Algebra I
Applied Biology/Chemistry I
Applied Communication

10th Grade

Applied Geometry
Applied Biology/Chemistry II

Francis Tuttle Vo-Tech Center

(E1) Allied Health Careers I (1yr)
(E2) Allied Health Careers II (1 yr)

(F1) Child Care (2 yr)
(G1) Food Service Certification (2 yr)

Post-Secondary (Year 13)
(Enrollment Fee)

(E3) Practical Nursing
(E3) Respiratory Therapy Technician

Oklahoma City Community College

Associate Degree Program

(E3) Pre-Dentistry/Pre-Medicine
(E3) Emergency Medical Technology
(E3) Gerontology Technology
(E3) Health Psychology
(E3) Nursing
(E3) Occupational Therapy Assistant
(E3) Physical Therapist Assistant
(E3) Pre-Pharmacy
(E3) Psychology
(G2) Food Service Management
(F2) Child Development

BUSINESS

Western Heights High School

9th Grade

Applied Algebra I
ABC I
Applied Communication

10th Grade

Applied Geometry
Principles of Technology I

Francis Tuttle Vo-Tech Center

(H1) Applied Accounting (1 yr)
(I1) Banking and Financial Services (1 yr)
(J1) Office & Secretarial (1 yr)
(K1) Microcomputer Applications (1 yr)

(Above programs are available as post-secondary)

Oklahoma City Community College

Associate Degree Program

(K2) Computer Science
(J2) Office Admin.
- *Legal Secretary*
- *Office Auto. Spec.*
- *Admin. Secretary*

(I2, H2) Finance

WESTERN HEIGHTS HIGH SCHOOL TENTATIVE SIX YEAR PLAN OF STUDY

Name _____ Occupational Major _____ Date _____

Postsecondary Major _____

REQUIREMENTS	GRADE 9		GRADE 10		GRADE 11		GRADE 12		GRADE 13		GRADE 14	
	Courses	Credits	Courses	Credits	Courses	Credits	Courses	Credits	Courses	Credits	Courses	Credits
English (4 years) 1 Semester Speech/ Communication	1.											
Mathematics *(3 years) Opt 1 (2 years) Opt 2	2.											
Science (2 years) Opt 1 (3 years) Opt 2	3.											
Social Studies 1 Sem. OK History 1 Sem. Geography 1 Yr. Amer. History 1 Yr. World History 1 Sem. Government	4.											
	5.											
1 Sem. Economics	6.											
1 Sem. Physical Ed 1 Sem. Health	7.											

*one year must be Algebra I

CREDITS EARNED (by year)

SUMMER SCHOOL

Year	Courses	Credits

NIGHT SCHOOL

Year	Courses	Credits

Grand Total Credits _____

ARTICULATION

Cooperative planning between secondary, vocational, and post-secondary institutions is one of the most important elements of the Tech Prep process. By smoothing the transition among these schools, students can save considerable time and money in post-secondary education. The articulation process makes it possible to coordinate the development of planned sequences of coursework that prepares students for the workplace through the interaction of academic and vocational, and secondary and post-secondary institutions. Consequently, there is no duplication of coursework for students and reduced cost for taxpayers.

Cooperative Agreement

A cooperative agreement is a formal agreement that has been approved by the governing bodies of a vocational-technical school and a community college. This agreement authorizes adult vo-tech students to receive college credit for course work completed on the vo-tech campus. The community college awards the college credit. Curriculum is aligned course by course between instructors of each institution and reviewed annually.

Articulation Agreement

An articulation agreement states course work a high school student takes at FTVTC that has been approved for the cooperative agreement may be used for advanced standing credit at the community college if the coursework is no older than 2 years and the student has achieved a letter grade of B or better.

Examples of a cooperative agreement and an articulation agreement between Francis Tuttle Vo-Tech Center and Oklahoma City Community College appear at the end of this section.

WHAT IS ARTICULATION?

According to the Carl Perkins Act, articulation is a process designed to provide students with a nonduplicative sequence of progressive achievement leading to competencies in a Tech Prep education program.

The idea of students beginning to earn a post-secondary degree while still in high school was developed in the mid-80s by Dale Parnell, president and chief executive officer of the American Association of Community and Junior Colleges and a former high school teacher, principal, school superintendent, state superintendent of schools, professor and university president. Through his Tech Prep Associate Degree concept, Parnell suggested, "activate students in those last two years of high school, making sure they have all the basic skills and starting them toward a post-secondary degree much sooner."

With cooperation between secondary and post-secondary educational institutions (articulation), CREATE's "4+2+2" is a eight-year degree program that begins in the 9th grade, progresses through an associate degree diploma at Oklahoma City Community College or a two-year certificate, and culminates in a baccalaureate degree at the University of Oklahoma or University of Central Oklahoma, if the career choice so requires. This agreement allows adult students enrolled at FTVTC in the Advanced Technology Center and Business Education Center to receive college credit from OKCCC. Competencies are aligned by instructional staff from each institution. This agreement is expanding to include health related courses.

The "4+2+2" objective is to provide a web of support for students in developing career plans by linking all available resources: schools, post-secondary institutions, apprenticeship programs with the active support of business, industry and the community at large.

CURRICULUM ARTICULATION

Teachers are responsible for determining the possible overlap in competencies taught, the possibilities for advanced standing and the possibility for dual credit arrangements. Putting these content experts together is the quickest way to get articulation moving.

STEPS FOR SUCCESSFUL ARTICULATION (5)

1. Identify the institutions that will benefit and the key players in each system.

    * Why is the initial site seeking articulation?
    * What is the need for articulation at all sites?
    * What are the possible barriers?

2. Schedule a planning meeting for all previously identified players.

    * Establish broad goals
    * Develop a timeline and list tasks
    * Set annual goals (at least a 2-hour meeting)

3. Secure policy-level approval of chief executive officers and encourage them to discuss articulation at his/her site with other administration and faculty.

4. Establish a planning team comprised of an articulation coordinator from each partner institution.

5. Orient staff members of participating organizations.
6. Arrange interagency work sessions.
7. Submit draft agreements for approval.
8. Publicize the articulation.
9. Implement the process.
10. Review the process annually.

SAMPLE ARTICULATION PLAN

Francis Tuttle Vo-Tech Center
Oklahoma City Community College

1. The student must bring the course transcript to the Registrar at Oklahoma City Community College for evaluation. The student must be enrolled or be eligible to enroll at Oklahoma City Community College.

2. The student will be required to pay the advanced standing credit fee of $5 per credit hour for the credit to be applied.

3. Advanced standing credit awarded to the student must be validated by successful completion of 12 or more semester hours at the awarding institution before being placed on the student's official transcript.

4. All coursework presented by the student must be no more than two years old.

5. Francis Tuttle Vo-Tech Center will send Oklahoma City Community College documentation to substantiate Tech Prep student course work.

6. Students who are awarded advanced standing credit will receive a neutral grade of satisfactory (S) to designate the advanced standing credit.

7. Once advanced standing credit has been validated and recorded, the credit will then be transferable on the same basis as if the credit had been earned through regular study at Oklahoma City Community College.

COOPERATIVE AGREEMENT BETWEEN OKLAHOMA CITY COMMUNITY COLLEGE AND FRANCIS TUTTLE AREA VOCATIONAL-TECHNICAL SCHOOL DISTRICT NUMBER 21

The parties to this Cooperative Agreement are Oklahoma City Community College, hereinafter referred to as "College," and Francis Tuttle Area Vocational-Technical School District Number 21, hereinafter referred to as "Francis Tuttle."

Whereas, the parties believe that educational opportunities in the Oklahoma City metropolitan area should be of the highest quality and be delivered to the public in the most efficient manner possible;

Whereas, the parties desire to enter into a cooperative agreement to provide educational programs which are designed to meet the standards of the Oklahoma state Regents for Higher Education for awarding the associate degree in technical-occupational programs;

Whereas, the parties desire to enter into a cooperative agreement to provide educational programs which are designed to meet standards of the Oklahoma State Department of Vocational and Technical Education;

Whereas, this Cooperative Agreement is in compliance with all policies of the Oklahoma State Regents for Higher Education and the Oklahoma State Department of Vocational and Technical Education;

The Parties agree to the following terms and conditions.

1. All faculty provided by Francis Tuttle who teach courses within the scope of this Cooperative Agreement shall be employees of and be governed by the Board of Education of Francis Tuttle. Said faculty, for the purposes of this Cooperative Agreement only, shall be considered faculty of College in order that students who desire to do so may obtain college credit for classes completed by said students pursuant to this Cooperative Agreement. College shall have no liability for payment of salary of benefits to said faculty and said faculty shall not be governed by, nor have any rights pursuant to, the policies of the Board of Regents of College. Any faculty provided by College shall be employees of and governed by the Board of Regents of College. Francis Tuttle shall have no liability for payment of salary or benefits to said faculty and said faculty shall not be governed by, nor have any rights pursuant to, the policies of the Board of Education of Francis Tuttle. All faculty teaching courses pursuant to this Cooperative Agreement shall comply with the education and experience requirements of both parties.

2. Students who elect to enroll for college credit shall be concurrently enrolled in Francis Tuttle and College. Such students shall be considered by Francis Tuttle to be in-district students. Such students must comply with each institution's admissions standards and program requirements. To earn college credit, the student must demonstrate the accomplishment of course objectives established by College.

3. Both parties shall be responsible for advisement and enrollment of students enrolled, or desiring to enroll, in programs encompassed by this Cooperative Agreement. Student records and information shall be provided by either party to the other, pursuant to the requirements of such other party.

4. Students may enroll at either College or Francis Tuttle. Students enrolling at College shall pay college required enrollment fees. Students enrolling at Francis Tuttle shall pay Francis Tuttle required enrollment fees.

5. Students may enroll at College and receive instruction at Francis Tuttle. For such students, College shall pay applicable student enrollment fees to Francis Tuttle.

6. Students may enroll at College and receive instruction at College. For such students, College shall not owe, nor shall it pay, fees of any kind to Francis Tuttle.

7. For students enrolled by Francis Tuttle, Francis Tuttle shall pay College the applicable student enrollment fees approved by the Oklahoma State Regents for Higher Education.

8. Faculty shall maintain student performance records and shall report student progress to Francis Tuttle and College following procedures of each respective institution.

9. College shall maintain student transcripts of college credit and all student records pertinent to college credit.

10. Students enrolled in technical-occupational courses who receive instruction at Francis Tuttle shall be included in the workload report to the Oklahoma State Department of Vocational and Technical Education.

11. Bona fide expenditures for administrative and academic support incurred by College shall be included in cost data submitted to the Oklahoma State Regents for Higher Education. Program enrollments shall be included in enrollment data submitted by College to the Oklahoma State Regents for Higher Education.

12. The Associate of Applied Science Advisory Committee for each program encompassed by this Cooperative Agreement shall be jointly managed by the parties.

13. Design and modification of the curriculum shall be the mutual responsibility of both parties. Francis Tuttle shall insure compliance with standards of the Oklahoma State Department of Vocational and Technical Education. College shall insure compliance with requirements of the Oklahoma State Regents for Higher Education for awarding the associated degree in technical-occupational programs.

14. Persons designated by the Superintendent of Francis Tuttle and President of College shall have mutual responsibility for program oversight.

15. Operational guidelines shall be jointly developed by staff from the parties as designated by Superintendent of Francis Tuttle and President of College.

16. College shall provide instruction for general education and technical support courses. Such courses may be scheduled at Francis Tuttle on a space Available basis.

17. Descriptive materials, such as catalogs, brochures, etc., developed to support the cooperative programs shall emphasize the cooperative nature of such programs and shall identify both parties as partners in delivering quality education to the citizens of Oklahoma.

18. This Cooperative Agreement and the programs pursuant thereto shall be subject to review and approval by the Oklahoma State Department of Vocational and Technical Education and the Oklahoma State Regents for Higher Education. This Cooperative Agreement shall not become effective until approved by the Oklahoma State Department of Vocational and Technical Education and the Oklahoma State Regents for Higher Education.

19. This Cooperative Agreement applies to the educational programs listed in Exhibit One, attached hereto.

20. This Cooperative Agreement may be modified by written addendum approved by the governing board of both parties, the Oklahoma State Department of Vocational and Technical Education and the Oklahoma State Regents for Higher Education.

21. This Cooperative Agreement was approved by the Board of Education of Francis Tuttle on November 22, 1988.

22. This Cooperative Agreement was approved by the Board of Regents of College on November 22, 1988.

Dr. Kenneth Walker, President
Oklahoma City Community College

November 22, 1988
Date

Bruce Gray, Superintendent
Francis Tuttle Area Vocational-Technical School District Number 21

November 22, 1988
Date

John Michael Williams
Chairman, Board of Regents
Oklahoma City Community College

November 22, 1988
Date

David Brown
President, Board of Education
Francis Tuttle Area Vocational-Technical School District Number 21

November 22, 1988
Date

ATTEST:

Secretary

ATTEST:

~~Secretary~~ CLERK
DEPUTY

TECH PREP
ARTICULATION AGREEMENT

Oklahoma City Community College

and

Francis Tuttle Vocational-Technical Center District No. 21

A coalition of schools was developed to provide high school students an avenue for careers in technical fields. This consortium, Consortium to Restructure Education through Academic and Technological Excellence (CREATE) exists among Oklahoma City Community College, Francis Tuttle Vocational Technical Center No. 21 and the school districts served by Francis Tuttle Vocational Technical Center. As part of the Tech Prep curriculum, students enroll in vocational courses at Francis Tuttle Vocational Technical Center while completing their high school diploma. The subject areas emphasized in the Tech Prep curriculum include business, health, and industrial technology.

Oklahoma City Community College recognizes that students completing certain courses at Francis Tuttle Vocational Technical Center have accomplished some of the same objectives as coursework offered at Oklahoma City Community College. It is also recognized by Oklahoma City Community College that students participating in the Tech Prep program should receive proper recognition for this academic learning.

In an effort to recognize the accomplishments of students participating in the Tech Prep consortium, Oklahoma City Community College and Francis Tuttle Vocational Technical Center have entered into this articulation agreement. The purpose of this agreement is to identify a means of assessing, evaluating, and validating coursework taken at Francis Tuttle Vocational Technical Center, which will enable students to be awarded advanced standing credit at Oklahoma City Community College. Additionally, this agreement will present procedures for awarding such credit.

As outlined in Oklahoma State Regents for Higher Education Policy II-2-76, Standards of Education Relating to Advanced Standing Credit:

> D. Learning experiences gained in other than accredited institutions of higher education must be validated on a course by course basis at the institution granting such credit . . .

The Oklahoma City Community College faculty will, on a course-by-course basis, evaluate the objectives of courses presented at Francis Tuttle Vocational Technical Center, and validate that the objectives, standards, and examinations are comparable for students taking like courses at Oklahoma City Community College. Upon validation by the Oklahoma City Community College faculty, a course will be listed as equivalent to a course offered by Oklahoma City Community College. This evaluation and validation procedure will occur annually, and previously-approved courses will be reviewed by the Oklahoma City Community College faculty annually. Approved course equivalencies will be listed in a document entitled "Articulation Resource Guide - OKCCC and FTVT."

As this agreement is under the Oklahoma State Regents for Higher Education policy outlined above, application of the articulation agreement will meet the requirements set forth in II-2-76.

Students who have successfully completed approved courses or programs of study will be able to present a certified transcript from Francis Tuttle Area Vocational Technical Center to the Oklahoma City Community College Registrar for Advanced Standing Credit. In order for a student to be eligible for advanced standing under this agreement, the student must be currently enrolled or eligible to re-enroll at Oklahoma City Community College. The Oklahoma City Community College Registrar, according to the "Articulation Resource Guide - OKCCC and FTVT" list, will determine whether the student has coursework which may be considered for advanced standing credit. The student will be required to pay the advanced standing credit fee in order for the credit to be applied. As stated in the Oklahoma City Community College Catalog and Oklahoma State Regents for Higher Education policy, advanced standing credit awarded to a student must be validated by successful completion of 12 or more semester hours at the awarding institution before being placed on the student's official transcript. All coursework presented by a student must be no more than two years old to ensure consistency of coursework.

Students who are awarded advanced standing credit will receive a neutral grade of satisfactory (S) to designate the advanced standing credit. Once advanced standing credit has been validated and recorded, the credit will then be transferable on the same basis as if the credit had been earned through regular study at Oklahoma City Community College.

This policy will become effective for students entering Oklahoma City Community College as of the Fall semester of the 1992-1993 academic year.

This agreement is entered into this 8th day of February, 1993.

Robert P. Todd, Ed.D.
Vice President for Instruction
Oklahoma City Community College

Bruce Gray
Superintendent
Francis Tuttle Vocational Technical Center

ARTICULATION RESOURCE GUIDE

OKLAHOMA CITY COMMUNITY COLLEGE
AND
FRANCIS TUTTLE VOCATIONAL CENTER

AUTOMATED/AEROSPACE MANUFACTURING

Course #	OKCCC Courses	CH	FTVTC Equivalency (Must complete all courses listed)	Min. Grade
PRDT 1213	Industrial Communications	3	Industrial Communications	
PRDT 1223	Mathematics for Technical Careers I	3	Mathematics for Technical Careers I	
PRDT 1413	Computer Applications	3	Computer Applications	
PRDT 1532	Programmable Controller Programming	2	Programmable Controller Programming	
PRDT 1542	Programmable Controller Interfacing	2	Programmable Controller Interfacing	
PRDT 2523	Electrohydraulic Servos	3	Electrohydraulic Servos	
PRDT 2603	Sensors and Position Devices	3	Sensors and Position Devices	
PRDT 2613	Applications of CNC/IMC Systems	3	Applications of CNC/IMC Systems	
PRDT 2623	Troubleshooting CNC/IMC Systems	3	Troubleshooting CNC/IMC Systems	
PRDT 2633	Applications of ASRS/CIM Systems	3	Applications of ASRS/CIM Systems	
PRDT 2702	Automated Systems Integration Practicum	2	Automated Systems Integration Practicum	

COMPUTER-AIDED DESIGN/DRAFTING

Course #	OKCCC Courses	CH	FTVTC Equivalency (Must complete all courses listed)	Min. Grade
DDT 1044	Engineering Drafting	4	Engineering Drafting	
DDT 1213	Intro. to Computer-Aided Design/Drafting	3	Intro. to Computer-Aided Design/Drafting	
DDT 1253	CAD 3-D Modeling	3	CAD 3-D Modeling	
DDT 2023	Design Mechanics	3	Design Mechanics	
DDT 2113	CAD Systems Operations & Configurations	3	CAD Systems Operations & Configurations	
DDT 2163	CAD Programming and Structures	3	CAD Programming and Structures	

COMPUTER SCIENCE

Course #	OKCCC Courses	CH	FTVTC Equivalency (Must complete all courses listed)	Min. Grade
CS 1203	Intro. to Computers and Programming	3	Intro. to Computer Intro. to Programming Database Management	
CS 1243	BASIC Programming Language	3	Intro. to Computers Intro. to Programming	
CS 1332	Microcomputer Database Application	2	Database Management	
CS 1342	Microcomputer Spreadsheet Application	2	Electronic Spreadsheet	
CS 1353	Microcomputer Operating Systems	3	IBM PC/DOS	

INDUSTRIAL ELECTRONICS

Course #	OKCCC Courses	CH	FTVTC Equivalency (Must complete all courses listed)	Min. Grade
ET 1014	DC/AC Fundamentals	4	Fund. of Electronics	
ET 1114	Solid State Circuits	4	Electronic Devices	
ET 1124	Digital Logic Fundamentals	4	Basic Digital Devices	
ET 2014	Control Devices	4	Control Devices	
ET 2044	Electromechanical Devices	4	Electromechanical DVC	
ET 2032	Industrial Electricity	2	Industrial Electricity	
ET 2124	Control Systems	4	Computer Fundamentals	
ET 2353 ET 2363	Instrumentation & Control I Instrumentation & Control II	6	Fluid Power Systems	
PRDT 1213	Industrial Communications	3	Introduction to Quality Control	
PRDT 1223	Introduction to Computer-Aided Manufacturing	3	Computer-Aided Manufacturing	
PRDT 1532	Programmable Controller Programming	2	Programmable Controller Programming	
PRDT 1542	Programmable Controller Interfacing	2	Programmable Controller Interfacing	

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MANUFACTURING TECHNOLOGY

Course #	OKCCC Courses	CH	FTVTC Equivalency (Must complete all courses listed)	Min. Grade
PRDT 1213	Industrial Communications	3	Industrial Communications	
PRDT 1223	Intro. to Computer-Aided Design/Drafting	3	Intro. to Computer-Aided Design/Drafting	
PRDT 1413	Fluid Power	3	Fluid Power	
PRDT 1532	Programmable Controller Programming	2	Programmable Controller Programming	
PRDT 1542	Programmable Controller Interfacing	2	Programmable Controller Interfacing	
PRDT 2112	Intro. To Quality Control	2	Intro. To Quality Control	
PRDT 2523	Electrohydraulic Servos	3	Electrohydraulic Servos	
PRDT 2532	Robotics	2	Robotics	
PRDT 2544	Computer Integrated Manufacturing	4	Computer Integrated Manufacturing	
PRDT 2553	Computer-Aided Machining	3	Computer-Aided Machining	
PRDT 2563	Production Management	3	Production Management	
PRDT 2663	Industrial Safety	3	Industrial Safety	

11/05/92

OFFICE ADMINISTRATION

Course #	OKCCC Courses	CH	FTVTC Equivalency (Must complete all courses listed)	Min. Grade
OA 1033	Office Machines	3	Typing Review	
OA 1313	Intermediate Typewriting	3	Advanced Typing Keyboarding Typing Practice Set	
OA 2213	Word Processing	3	IBM PC Word Processing Package	
OA 2043	Secretarial Office Procedures	3	Filing Receptionist	
OA 2133	Automated Records Management	3	Automated Records Management	
OA 2313	Word Processing II	3	Lotus 1-2-3 Special Typing Practice Set/Word Processing Set	
OA 2433	Machine Transcription	3	Spelling Machine Transcription	

11/05/92

FRANCIS TUTTLE VO-TECH CENTER PROGRAMS and OKLAHOMA CITY COMMUNITY COLLEGE DEGREES

FTVTC PROGRAM	OKCCC DEGREES AVAILABLE
Automation/Aerospace Manufacturing Technician, Emphasis: Industrial Electronics	• Associate of Applied Science in Industrial Electronics, CIM Emphasis • Associate of Applied Science, Technical and Occupational Technician Emphasis
Automation/Aerospace Manufacturing Technician, Emphasis: Manufacturing	• Associate of Applied Science in Manufacturing Technology, CIM Emphasis • Associate of Applied Science, Technical and Occupational Technologist Emphasis
CADD/CAM Specialist	• Associate of Applied Science in Computer-Aided Design/Drafting
Instrumentation and Control Technician	• Associate of Applied Science in Industrial Electronics, Instrumentation and Control Emphasis • Associate of Applied Science in Electronics
Microcomputer Applications	• Associate of Applied Science in Computer Science, Microcomputer Specialist Emphasis
Microcomputer Technician	• Associate of Applied Science in Industrial Electronics, Microcomputer Emphasis • Associate of Applied Science in Microcomputer Support Technology • Associate of Applied Science in Electronics
Office and Secretarial Occupations	• Associate of Applied Science in Office Administration, Administrative Secretary Emphasis • Associate of Applied Science in Office Administration, Legal Secretary Emphasis • Associate of Applied Science in Office Administration, Office Automation Specialist Emphasis
CNC Technologist	• Associate of Applied Science in Manufacturing Technology, CNC Emphasis

Tech Prep Articulation
Declaration of Intent

Please complete the following information, get one of your parents/guardian to sign and return to your instructor by September 23, 1993.

September 17, 1993

Name _____
First Middle Last

High School _____

I received information about articulation between Francis Tuttle Vo-Tech Center and Oklahoma City Community College. To be able to articulate coursework, I must make a B or better in the subject area, have my instructor's approval, follow the Tech Prep articulation process and enroll or co-enroll at Oklahoma City Community College whereby the articulated coursework is no more than two years old.

I plan to participate in the Tech Prep articulation process this year. ____yes ____no

I am enrolled in the following program at Francis Tuttle Vo-Tech Center:

___Drafting
___Office & Secretarial Occupations
___Banking & Financial Services
___CADD/CAM
___Electronics Technology
___Applied Accounting
___Microcomputer Applications
___ _____

I have taken or am enrolled in one or more of the following classes at my high school:

___Applied Algebra
___Physics/Principles of Technology
___Applied Communication
___Algebra I
___Geometry
___Physics
___Applied Geometry
___Biology/Applied Biology
___Chemistry/Applied Chemistry
___Algebra II
___Trigonometry

_____ _____
Student Signature Date

_____ _____
Parent/Guardian Signature Date

Complete this form and return it to your FTVTC instructor by September 23, 1993. Route to Instructional Services, attention Tech Prep. Thank you.

Tech Prep Articulation Survey

Name _____
First Middle Last

High School _____

Check the program in which you are enrolled at Francis Tuttle Vo-Tech Center.

___Drafting
___Office & Secretarial Occupations
___Banking & Financial Services
___CADD/CAM
___Electronics Technology
___Applied Accounting
___Microcomputer Applications
___ _____

Check the classes you have taken or are presently enrolled in at your high school. (Mark all that apply)

___Applied Algebra
___Physics/Principles of Technology
___Applied Communication
___Algebra II
___Geometry
___Applied Geometry
___Biology/Applied Biology
___Chemistry/Applied Chemistry
___Algebra I

Did you do a career planner last year? ___yes ___no

Do you have a career plan on file? ___yes ___no

Have you ever taken an interest inventory? ___yes ___no When? _____

Do you plan to take advantage of the articulation plan with Oklahoma City Community College? ___yes ___no

Have you taken the ACT? ___yes ___no If so, what was your composite score? ____

Have you taken the SAT? ___yes ___no If so, what was your combined score? ____

What kind of job do you want when you complete high school?

What are your plans after high school graduation?

COMMENTS

Was this session on articulation informative? ___yes ___no

Do you need any additional information? ___yes ___no If yes, what?

Complete this form and leave at the conclusion of this meeting.

Tech Prep

BUSINESS EDUCATION

Applied Accounting
Francis Tuttle Vo-Tech Center
12777 N. Rockwell
Oklahoma City, Oklahoma 73142-2710
(405)722-7799

Student:_____

Social Security Number:_____

The above student has completed the Applied Accounting program at Francis Tuttle Vo-Tech Center as a Tech Prep student and is requesting advanced standing credit. Enrollment in the Tech Prep program was from _____to_____. The following Oklahoma City Community College approved courses have been successfully completed.

OKLAHOMA CITY COMMUNITY COLLEGE COURSE	FRANCIS TUTTLE VO-TECH CENTER COURSE	*Grade	Instructor's Signature
CS 1353 Microcomputer Operating System	DOS		
OA 2213 Word Processing	WordPerfect		
CS 1342 Microcomputer Spreadsheet	Lotus		
CS 1332 Microcomputer Database Applications	dBase IV		
OA 1033 Office Machines	Ultrakey Keyboard Mastery Beg. and Adv. Electronic Calculator		

Business Department Chair_____

* Grade based upon institutionally constructed and administered examinations and/or performance testing.

WHITE-OKCCC PINK-FT RECORDS YELLOW-STUDENTS BLUE-INSTRUCTOR

BEST COPY AVAILABLE

Tech Prep

BUSINESS EDUCATION

Banking & Financial Services
Francis Tuttle Vo-Tech Center
12777 N. Rockwell
Oklahoma City, Oklahoma 73142-2710
(405)722-7799

Student:_____

Social Security Number:_____

The above student has completed the Banking & Financial Services program at Francis Tuttle Vo-Tech Center as a Tech Prep student and is requesting advanced standing credit. Enrollment in the Tech Prep program was from _____to_____. The following Oklahoma City Community College approved courses have been successfully completed.

OKLAHOMA CITY COMMUNITY COLLEGE COURSE	FRANCIS TUTTLE VO-TECH CENTER COURSE	* Grade	Instructor's Signature
OA 2213 Word Processing	WordPerfect		
CS 1342 Microcomputer Spreadsheet	Lotus		
CS 1353 Microcomputer Operating System	DOS		
OA 1033 Office Machines	Ultrakey Keyboard Mastery Beg. and Adv. Electronic Calculator		

Business Department Chair_____

* Grade based upon institutionally constructed and administered examinations and/or performance testing.

WHITE-OKCCC PINK-FT RECORDS YELLOW-STUDENTS BLUE-INSTRUCTOR

BEST COPY AVAILABLE

Tech Prep

Business Education

Microcomputer Applications
Francis Tuttle Vo-Tech Center
12777 N. Rockwell
Oklahoma City, OK 73142-2710
(405)722-7799

Student: _____

Social Security Number: _____

The above student has completed the Microcomputer Applications program at Francis Tuttle Vo-Tech Center as a Tech Prep student and is requesting advanced standing credit. Enrollment in the Tech Prep program was from _____ to _____. The following Oklahoma City Community College approved courses have been successfully completed.

OKLAHOMA CITY COMMUNITY COLLEGE COURSE	FRANCIS TUTTLE TUTTLE VO-TECH CENTER COURSE	* Grade	Instructor's Signature
CS 1203 Intro. to Computers and Programming	Intro. to Computer Intro. to Programming Database Management		
CS 1243 BASIC Programming Language	Intro. to Computers Intro. to Programming		
CS 1332 Microcomputer Database Applications	Database Management dBase III Plus		
CS 1353 Microcomputer Operating System	IBM PC/DOS		
CS 1342 Microcomputer Spreadsheet	Lotus		
DA 2213 Word Processing	WordPerfect		

Business Department Chair _____

*** Grade based upon institutionally constructed and administered examinations and/or performance testing.**

WHITE-OKCCC PINK-FT RECORDS YELLOW-STUDENT BLUE-INSTRUCTOR

BEST COPY AVAILABLE

Tech Prep

Business Education

Office & Secretarial Occupations
Francis Tuttle Vo-Tech Center
12777 N. Rockwell
Oklahoma City, OK 73142-2710
(405)722-7799

Student: _____

Social Security Number: _____

The above student has completed the Office & Secretarial Occupations program at Francis Tuttle Vo-Tech Center as a Tech Prep student and is requesting advanced standing credit. Enrollment in the Tech Prep program was from _____ to _____. The following Oklahoma City approved courses have been successfully completed.

OKLAHOMA CITY COMMUNITY COLLEGE COURSE	FRANCIS TUTTLE VO-TECH CENTER COURSE	* Grade	Instructor's Signature
OA 1033 Office Machines	UltraKey Keyboard Mastery Beg. and Adv. Calculator		
OA 1313 Intermediate Typewriting	Electronic Typewriter Beg. and Adv. Formatting Review Practice Set: Insurance		
OA 2213 Word Processing	WordPerfect 5.1 WordPerfect Advanced 5.1		
OA 2043 Secretarial Office Procedures	Filing Receptionist Eduphone		
OA 2133 Automated Records Management	Recordkeeping Lotus Projects		
OA 2313 Word Processing II	Introduction to Desktop Publishing Practice Set: Medical or Legal		
OA 2433 Machine Transcription	Spelling Machine Transcription		

Business Department Chair _____

*** Grade based upon institutionally constructed and administered examinations and/or performance testing.**

WHITE-OKC PINK-FT RECORDS YELLOW-STUDENT BLUE-INSTRUCTOR

Tech Prep

CADD/CAM

Francis Tuttle Vo-Tech Center
12777 N. Rockwell
Oklahoma City, OK 73142-2710
(405)722-7799

Student:_____

Social Security Number:_____

The above student has completed the CADD/CAM program at Francis Tuttle Vo-Tech Center as a Tech Prep student and is requesting advanced standing credit. Enrollment in the Tech Prep program was from _____to_____. The following Oklahoma City Community College approved courses have been successfully completed.

OKLAHOMA CITY COMMUNITY COLLEGE COURSE	FRANCIS TUTTLE VO-TECH CENTER COURSE	* Grade	Instructor's Signature
DDT 1213 Introduction to CAD	Introduction to CAD		
DDT 1253 CAD 3D Modeling	CAD 3D Modeling		
DDT 1413 Computer Applications	Computer Applications		

Advanced Technology Department Chair_____

*** Grade based upon institutionally constructed and administered examinations and/or performance testing.**

BEST COPY AVAILABLE

WHITE-OKCCC PINK-FT RECORDS YELLOW-STUDENT BLUE-INSTRUCTOR

Tech Prep

Drafting

Francis Tuttle Vo-Tech Center
12777 N. Rockwell
Oklahoma City, OK 73142-2710
(405)722-7799

Student:_____

Social Security Number:_____

The above student has completed the Drafting program at Francis Tuttle Vo-Tech Center as a Tech Prep student and is requesting advanced standing credit. Enrollment in the Tech Prep program was from _____to_____. The following Oklahoma City Community College approved courses have been successfully completed.

OKLAHOMA CITY COMMUNITY COLLEGE COURSE	FRANCIS TUTTLE VO-TECH CENTER COURSE	* Grade	Instructor's Signature
DDT 1044 Engineering Drafting	Engineering Drafting		

Trade and Industrial Department Chair_____

* Grade based upon institutionally constructed and administered examinations and/or performance testing.

BEST COPY AVAILABLE

WHITE-OKCCC PINK-FT RECORDS YELLOW-STUDENT BLUE-INSTRUCTOR

Tech Prep

Electronics Technology

Francis Tuttle Vo-Tech Center
12777 N. Rockwell
Oklahoma City, OK 73142-2710
(405)722-7799

Student:_____

Social Security Number:_____

The above student has completed the Electronics Technology program at Francis Tuttle Vo-Tech Center as a Tech Prep student and is requesting advanced standing credit. Enrollment in the Tech Prep program was from _____to_____. The following Oklahoma City Community College approved courses have been successfully completed.

OKLAHOMA CITY COMMUNITY COLLEGE COURSE	FRANCIS TUTTLE VO-TECH CENTER COURSE	* Grade	Instructor's Signature
ET 1014 DC/AC Fundamentals	DC/AC Fundamentals		
ET 1114 Solid State Circuits	Solid State Circuits		
ET 1124 Digital Logic Fundamentals	Digital Logic Fundamentals		

Trade and Industrial Department Chair_____

* Grade based upon institutionally constructed and administered examinations and/or performance testing.

WHITE-OKCCC PINK-FT RECORDS YELLOW-STUDENTS BLUE-INSTRUCTOR

BEST COPY AVAILABLE

STAFF DEVELOPMENT

The effectiveness of the Tech Prep process rests with the skills, attributes and enthusiasm of the teaching and counseling staff. Focusing on the needs of the teachers and counselors will ultimately benefit the teaching/learning process. Therefore, it is important that they be a part of the planning process from the very beginning. Their insights are vital for effective planning.

Surveys are valuable tools in determining the need for purposeful staff development. It is through this process that misconceptions and implementation challenges can be addressed. Effective staff development builds knowledge of the Tech Prep process and goals; it communicates needs to be met and the benefit of change; and it promotes interaction between academic and vocational staff (6).

To document the inservice/staff development activities, a database is kept in the Tech Prep office. This database includes the school, instructor, topic, dates and length of the activity. Instructors can also use these activities to earn district-required staff development points.

Following this section are sample two-year plans for staff development, resource personnel and samples of CREATE's survey instruments used to assess needs and perceptions.

SEEING THE REASON FOR CHANGE

Because Tech Prep represents a basic change in class order and presentation, educators need encouragement in the area of change resistance. Some ideas might include:

* Present the Joel Barker video, "Paradigms".

* Compliment other people and programs and what is currently being done.

* Encourage teachers' understanding that Tech Prep will build enrollments and provide higher quality students for other programs.

* Use statistics about the need for more competency in graduates and balance them with statistics from Tech Prep sites showing positive improvements in this area, as well as reduced drop-out rates and improved test scores.

* Let teachers know Tech Prep is here to stay; it is not just a fad or a current administration's policy; it is a national movement in response to a worldwide change.

STAFF TRAINING

Teachers receive extensive training in several areas, including:

Application-based learning
Cooperative learning
Performance-based instruction
Integration of curriculum
Integration of higher order thinking skills
Performance-based curriculum writing
Learning styles
Student recruitment/selection
Business/industry involvement
Student assessment
Program evaluation

JOB SHADOWING FOR EDUCATORS

Instructors are given the opportunity to visit businesses on site and shadow practicing professionals in order to gain familiarity with the latest equipment, trends and techniques in the field. If possible, vocational and academic faculty can partner in the shadowing experience.

* Identify the purpose and expected outcomes
* Determine the cost and resources required
* Select the facility and the specific shadowing site
* Conduct the job shadowing activity
* Provide for evaluation and follow-up (7)

INTERNSHIPS FOR EDUCATORS

We are in the process of developing plans to provide intense training at the business site. The plan is designed to prepare educators to meet the needs of students and business through the hands-on experiences in the business environment.

The internships are scheduled for a minimum four-week period. All full-time secondary and post-secondary teachers and counselors who are involved with the subject matter being developed may apply. The internship will occur when the instructor is not on contract and compensation will be negotiated with the sponsoring company. The business site will be identified by local Tech Prep consortium members.

There are clearly defined responsibilities for participating interns (8).

* Attend a pre-internship orientation and post-internship follow-up.
* Follow all rules and policies of the company.
* Maintain a weekly log of experiences.
* Prepare a written summary/evaluation.
* Provide the host company with exit interview/evaluation
* Write a personal letter of thanks to the host company.
* Prepare a presentation/share information with staff and colleagues.
* Submit a news release to the media (with company approval).
* Incorporate new skills and knowledge into curriculum.

ENCOURAGING THE STAFF

A kind word, news of successful students, praise and encouragement go a long way toward inspiring the staff. Promote opportunities for instructors to present their ideas and programs at conventions and workshops. Solicit their input on every phase of the Tech Prep process. This helps to stimulate creativity and promotes a positive spirit and feeling of accomplishment.

Additional encouragement can be provided through special workshops. Examples of two such events follow.

Camp Discovery: Francis Tuttle Vo-Tech Center sponsors this five-day experience for public school educators. During the week counselors, teachers and principals listen to guest speakers from business and industry, have hands-on involvement in vo-tech and applied academics classes, and participate in group activities and educational expeditions. The enrollment sheet and agenda highlights appear at the end of this section.

Tech Prep Workshop: This two-day workshop is designed for principals, instructors and counselors to provide updates on Tech Prep activities and visits to business and industry. The agenda also includes items of interest to participants, such as career assessment and counselor responsibilities.

The following documents outline staff development plans and special event agendas.

EDUCATORS NEEDS ASSESSMENT SURVEY

Please rate the following by marking a number to indicate Tech Prep training needs:
(1 - least needed, 5 - most needed)

Training	1	2	3	4	5
Cooperative Learning					
Learning Styles					
Classroom Management					
Career Counseling for Technology					
Applied Academics Curriculum					
Tech Prep - The Big Picture					
Business and Industry Partnerships (Job Shadowing, Internships)					
Effective Teaching Techniques					
Curriculum Integration - Creating integrated teams					
Career Interest - Assessment and Guidance					
Marketing Tech Prep to Parents					
Marketing Tech Prep to Educators					
Student Recruitment					

Please mark one of the following:

☐ I prefer to attend inservice sessions on Saturdays with a paid stipend.

☐ I prefer to attend inservice sessions on weekdays with a paid substitute.

Please place a mark by your current job title:

☐ secondary instructor

☐ vocational instructor

☐ secondary administrator

☐ secondary guidance counselor

☐ secondary vocational counselor

☐ postsecondary instructor

☐ postsecondary administrator

☐ postsecondary guidance counselor

☐ curriculum coordinator

☐ other

Spend Five Exciting Days Experiencing:

* 3 days "hands-on" involvement in vo-tech classes
* Insights from business & industry panelists
* Adventurous group activities
* Challenging guest speakers
* Educational expeditions

CAMP DISCOVERY IV BONUSES:

* Lunches and breaks furnished
* Staff development points (if approved by home school district)
* $30.00/day stipend

Fourth annual workshop for teachers, counselors and principals from Putnam City, Western Heights, Edmond, Deer Creek and Crescent Public Schools. Persons attending from out of district will be considered on space available basis with no stipend.

SPONSOR: Francis Tuttle Vo-Tech Center

June 14-18, 8:30 a.m. - 3:30 p.m.

Make plans to enroll early ...
Only 45 spaces available!

TO ENROLL:
Complete the following information and mail to:

FRANCIS TUTTLE
VO-TECH CENTER
Attention: Amy Henderson
Student Services
12777 North Rockwell
Oklahoma City, OK
73142-2710

Official Camp Discovery Registration Form

Name _____ SS# _____
last first middle

Address _____

City _____ OK _____ (_____) _____
ZIP HOME PHONE

School _____

Position _____

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Note: Return to Student Services by May 31, 1993

FRANCIS TUTTLE VO-TECH CENTER

CAMP DISCOVERY IV

A WORKSHOP FOR EDUCATORS
JUNE 14-18, 1993

HIGHLIGHTS

June 14, Monday

- Welcome and philosophy of Francis Tuttle - Superintendent, FTVTC
- Guest speaker - Superintendent, Tulsa Technology Center
- Overview of vocational programs
- Introduction to Tech Prep and Applied Academics - Superintendent, FTVTC
- Campus-wide tour

June 15, Tuesday

- Career Guidance Materials - Department Chair, Student Services
- Guest Speaker - State Director, Oklahoma Department of Vo-Tech Education
- Vocational classes - choice of 3 of the following in 4-hour blocks:

Auto Body	Commercial Printing	Child Care
Electronics	Food Service	Carpentry
Machine Shop	Office Education	Drafting

June 16, Wednesday

- Tech Prep - Administration of Career Occupational Preference Survey (COPS)
- Vocational class

June 17, Thursday

- Tech Prep - Applied Academics classes - choice of 2 of the following in 45-minute blocks:

Principles of Technology	Applied Math
Applied Biology/Chemistry	Applied Communication

June 18, Friday

- Panel/Business and Industry
- Francis Tuttle Adult Program Panel
  - Adult Short-term Education
  - Business Ed/Cooperative Agreement
  - Business/Industry Service
  - Health Occupations
- Advanced Technology Center Tour
- Workshop evaluation
- Video of the week's activities
- Certificates presented

TECH PREP TRAINING PLAN

FIRST YEAR PLANNING

After notification in June of Tech Prep implementation, include the following preliminary steps to initiate Tech Prep program:

- Meet with Superintendents
- Identify Coordinator

YEAR ONE

Participants	Training Activity	Time Sequence	Length
Superintendents, central office, principals, assistant principals, deans (managers of consortia)	Overview of Tech Prep	July	1/2 day
Counselors, math & science instructors	Overview of Tech Prep (one-day tour)	July	2 days
Instructors	Tech Prep Day - OVA Tulsa	August	1 day
Representatives of consortium	NTPN Conference	September/ October	4 days
Instructors, curriculum staff	Subject matter orientation- math, science, communication	October and/or December	2 days
Instructors, curriculum staff	Cooperative Learning	January	2 days
Instructors, curriculum staff	Cooperative Learning	March	2 days
Superintendents, central office, principals, assistant principals, deans (managers of consortia), counselors, math and science instructors	Tech Prep conference	April	2 days
Instructors, curriculum staff	Subject matter workshop	June/July	10 days
Instructors, curriculum staff	Manipulative workshop	July	1 day
Instructors, counselors, principals	Vocational/public ed. orientation	June	3 days

TECH PREP TRAINING PLAN

YEAR TWO

Participants	Training Activity	Time Sequence	Length
Selected instructors	Train the Trainer Workshop Cooperative learning, Learning styles, Critical thinking	July	3 days
All	Tech Prep Day-OVA	August	1 day
Instructors	Instructor's meeting	bi-monthly	1 1/2 hrs
Instructors, counselors, principals	Tech Prep Inservice (1 day business/industry)	June	2 days
Instructors, counselors	Camp Discovery - "Vocational Education - What is it?"	June	1 week
Representatives of consortium	NTPN Conference	September/ October	4 days
Instructors	Cooperative Learning Review	November	1 day
Instructors	Learning styles	January	2 days
All	State Tech Prep Conference	April	2 days

COUNSELOR TRAINING SYSTEM				
The activity is to...	The purpose is to...	The responsible party is...	When	Evaluation...
Attend orientation session about Tech Prep (2 days)	Give "Big Picture Scope", cover needs of employers & counselor handbook	Tech Prep Student Services Committee & Tech Prep Specialist	Summer June	Verify by documentation & written evaluation of activity
Attend workshop covering Tech Prep to include a business tour (1 day)	Reinforce Tech Prep concept Explain why need data & what employers want	Tech Prep Student Services & Francis Tuttle Student Services Department	Fall October	Verify by documentation & written evaluation of activity
Attend workshop covering Tech Prep (1 day)	Reinforce Tech Prep & orientation Career Education Plan	Tech Prep Student Services Committee & Francis Tuttle Student Services Department	Spring April	Verify by documentation & written evaluation of activity
Attend state wide ODVTE Tech Prep Day	Give state wide scope	Oklahoma Department of Vocation & Technical Education	Summer	Verify by documentation

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CREATE'S TEACHER CERTIFICATION CRITERIA

A. Attendance at summer Applied Academics workshop in the assigned discipline provided through a college or university

B. Oklahoma Department of Education certification in subject matter

C. Attendance at a cooperative learning workshop

D. Attendance at a learning styles workshop

E. Attendance at the Oklahoma Tech Prep Conference, the National Tech Prep Network Conference or the ODVTE OVA preconference session in Tulsa

F. Attendance at either Camp Discovery or CREATE'S summer workshop

BUSINESS AND INDUSTRY

Tech Prep recognizes the importance of developing education and private-sector partnerships to ensure work-relevant learning experiences for students. Skills demanded by today's businesses and industries are not limited to advanced technical skills but include strong academic and interpersonal skills. Business and industry can be involved in defining needed competencies and skill levels and establishing performance standards for Tech Prep students who will be their future employees. To better prepare students for the workplace and for life, education and the private sector must collaborate and coordinate educational and work experiences.

Business and industry advisory committees supply the vital link between the workplace and the student. It is through this avenue that curriculum is developed and instructors are made aware of new technologies and methods and the needs of the business community as they relate to the workforce. Business focus groups also supply valuable suggestions for strengthening the business commitment and recommendations for marketing the Tech Prep process.

The following documents represent the basis of CREATE's involvement with business and industry. A sample business and industry commitment form is included, along with partnership agreements.

BUSINESS AND INDUSTRY COLLABORATION

Involving Business and Industry

Business and industry can partner with educational institutions in a variety of ways.

- providing students with work-based knowledge and skills
- providing tours of their facilities
- hosting open houses
- making classroom presentations
- providing work experience opportunities for instructors and counselors
- providing work-based learning experiences and internships for students
- participating as team teachers
- teaching classes in their settings
- providing or loaning equipment
- speaking at career days or other special events
- assisting in determining performance standards
- agreeing to priority hiring for graduates
- sponsoring scholarships for students
- guaranteeing placement of qualified graduates
- providing industry training for instructors and counselors

Determining Who Will Participate

The type of work experience selected depends on various internal and external factors.

- grade level of students who will participate
- specific program areas of concentration
- school or college location
- number of available business and industry sites
- types of businesses and industries in the district
- level of participation by business and industry sites
- availability and cost of transportation

Planning the Work Experience

There are several types of work experiences to consider when planning a Tech Prep initiative.

Alternative Work Experiences

- Shadowing
- Mentoring
- Internships
- Apprenticeships

Applied Academics Instructors

Shadowing provides students with opportunities to observe many workers in a variety of different jobs in business and industry settings. Shadowing experiences may be most suitable for students who are beginning the Tech Prep process. The length of shadowing experiences may vary from a one-time, one-hour experience to full-day experiences over several months. Students are usually not paid for shadowing experiences.

Mentoring pairs a student with an adult trained worker, preferably from the student's chosen career field. This experience clearly shows students the practical, work-related application of what they are learning in the classroom. Mentoring assists students in making a smooth transition from school to the world of work. Also, mentoring can assist students in deciding whether the career path they have selected is suitable for them.

Vocational-Technical Instructors

Internships operate as either paid or unpaid experiences. Internship experiences may be more appropriate and meaningful for students when offered during the summer months. Summer internships can provide more intensive work experiences, which allow students to feel and act like regular employees. Other short-term or part-time internships provide a good overview of business and industry and a sense of work life.

Apprenticeships are prescribed learning experiences in which an individual, called an apprentice, learns a specific trade through several years of on-the-job training and related instruction (U.S. Department of Labor, 1984). On-the-job training covers all aspects and parts of a particular occupation. Related instruction can take place in a classroom or through home-study courses. The instruction covers the techniques of the trade and also the theory behind the techniques. Classes are taught by experienced craftworkers and other skilled persons and can be scheduled during the day or evening.

Youth Apprenticeship programs are learning programs for young people enrolled in vocational education that combine on-the-job learning with classroom instruction, that offer a bridge between secondary and post high school training/education, and that lead to certification of mastery of work skills.

Characteristics of Effective Business/Industry Role Models

According to Everitt and Murray-Hick (1981), the hallmarks of a master mentor include:

- Strong interpersonal skills
- Organizational knowledge
- Exemplary supervisory skills
- Technical competency
- Personal power and charisma
- Status and prestige
- Willingness to be responsible for someone else's growth
- Ability to share credit
- Patience and risk taking

Functions of Business/Industry Role Models

- Provide information about the organization
- Provide guidance regarding specific skills, appropriate behavior, and how to function within the organization
- Tutor specific job skills
- Give feedback on observed behaviors
- Provide activities that will add to experience and skill development
- Provide guidance towards personal growth
- Provide encouragement, support, and reinforcement
- Assist in overcoming obstacles

Sample Business and Industry Collaboration

Purpose: To provide opportunities which will increase student motivation for and participation in business and industry partnerships

Business Responsibility

- Provide job shadowing, mentoring and volunteer staff
- Contribute to the development of job specific curriculum
- Provide supplies necessary for job specific training
- Offer student scholarships
- Provide teacher internships
- Serve in an advisory capacity
- Provide grants for implementation of special projects

School Responsibility

- Implement applied academics
- Assist in establishing criteria for student participation
- Develop scheduling flexibility for high school employment
- Assess the needs of business and industry
- Provide opportunities for job shadowing, mentoring, etc.
- Develop long-range plan to integrate business/industry into the total curriculum
- Provide on-site supervision and evaluation of students

Student Responsibility

- Complete Applied Algebra I or be currently enrolled
- Maintain an overall grade point average of at least 2.0
- Maintain an attendance record of 91%
- Secure recommendations from three teachers/administrators
- Undergo interest assessment
- Participate in interview process with parent/guardian
- Provide transportation for on-the-job training

TECH PREP--PARTNERSHIPS FOR A WORLD CLASS WORK FORCE

WHO WINS WITH TECH PREP?

- Employers win with well trained employees and input to the educational process.
- Students win with a first-rate technical education and options for post secondary technical training, associate degrees, or bachelor's degrees.
- High schools win with motivated students engaging in a purposeful plan of study and access to modern, site based equipment.
- Colleges win with better prepared students, increased enrollment, and fewer expenditures for remediation that could be used for more sophisticated, technological programs.
- America wins with a world-class work force to compete in a global marketplace.

PARTICIPATING SCHOOLS:

- Public Schools
- Public Schools
- Community College
- University
- Public Schools
- Public Schools
- Vo-Tech School

HOW CAN OUR BUSINESS COOPERATE? TECH PREP!

OUR FIRM MAY BE ABLE TO:

- ☐ Offer student internships and mentors
- ☐ Offer teacher internships
- ☐ Arrange Tours
- ☐ Provide guest speakers
- ☐ Contribute staff development support
- ☐ Contribute toward student scholarships
- ☐ Serve in an advisory capacity
- ☐ Donate supplies/equipment
- ☐ Other:_____

_____

Company_____

_____

Contact Person_____

Phone_____

Address_____

_____

City_____

State_____ Zip_____

Best Time of Day to Call:

_____

_____

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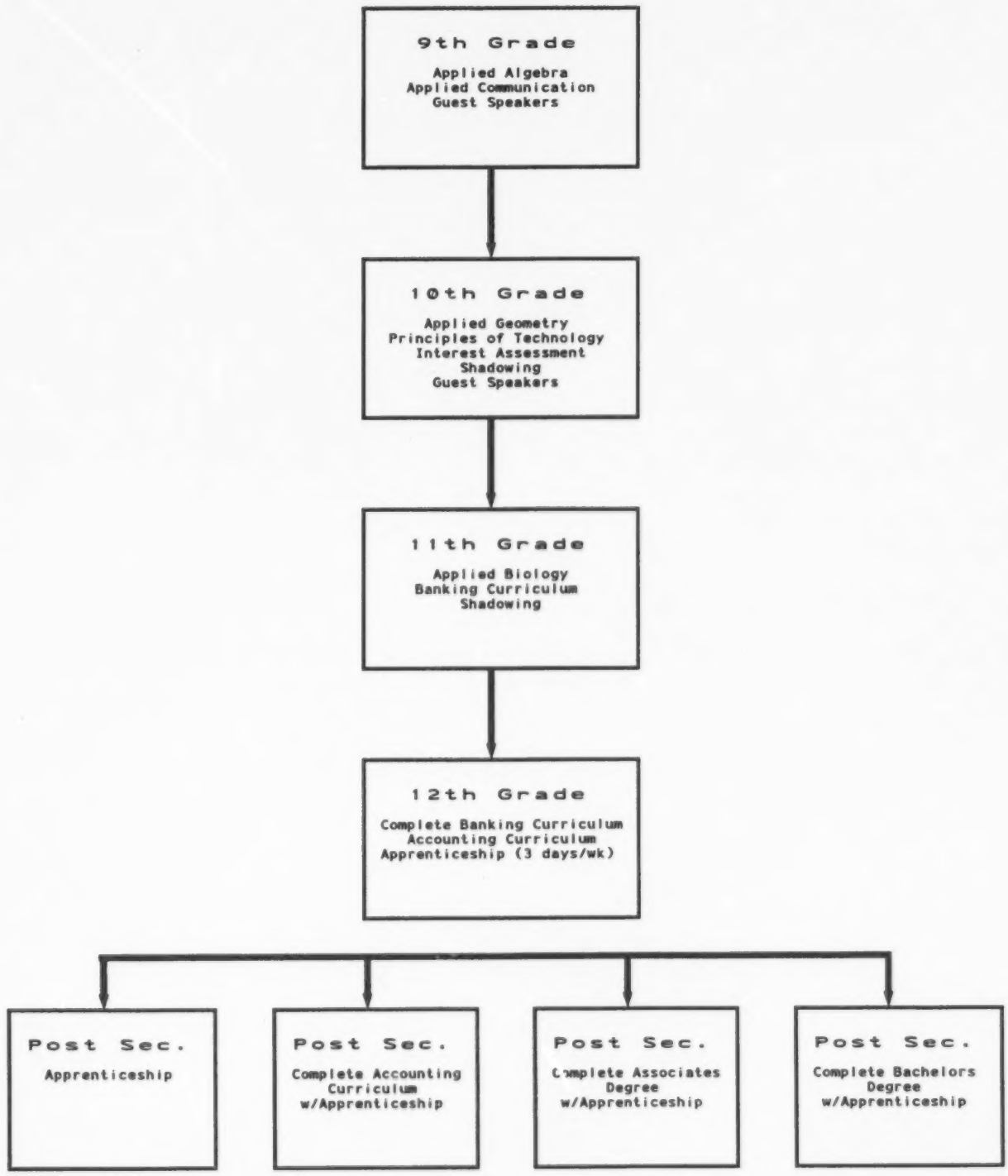
BUSINESS AND INDUSTRY PARTNERSHIP MODEL



GUIDANCE AND COUNSELING

Counselors must be involved from the start. They are vital to the career awareness programs in the elementary grades and they act as a liaison between faculty/staff, administration, community and student/parents. In addition, they assist students in identifying the right Tech Prep pathway and communicating the benefits and options of the Tech Prep approach.

Following is CREATE's Counselor Handbook which serves as a guide and reference for all participating schools.

COUNSELOR

HANDBOOK

Why Tech Prep?

There's no doubt in anyone's mind that America's public education system must change to better prepare students for the technological workplace.

Tech Prep gives us all a chance to work together — educators, parents, students and the business community — to provide an educational process that breaks down the barriers between high schools, colleges, and academic and vocational education. It gives us the chance to bring out the best abilities in our children and at the same time meet the changing employment needs of business and industry in a technology-driven world.

How to use the Counselor Handbook

We hope you'll use the handbook as a working reference — a tool for preparing a new generation of students for technologically advanced careers.

You will receive updated materials for this handbook periodically because as you know, the Tech Prep process is constantly evolving and changing.

Please let us know if something you need is missing!

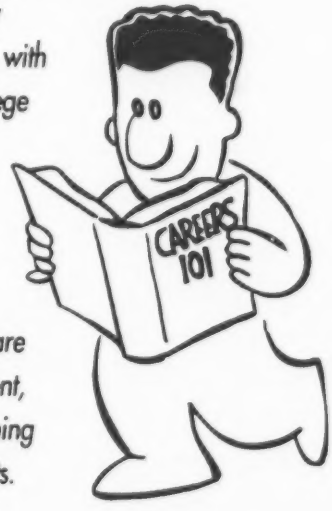
The Big Picture

The ultimate goal of Tech Prep is to develop a world-class workforce which is academically and technically competent, capable of adapting to rapid changes and prepared for lifelong learning in an always challenging, ever-changing environment.

Tech Prep is a national reform effort that is taking place in schools all over the country. It is not a "here-today, gone-tomorrow" fad. The process is already making a big difference in students' lives in other parts of the country. It is critical to our competitiveness in a world economy.

The Counselor's Role

Career counseling is crucial to helping the right students choose the Tech Prep pathway and the many options it provides. Tech Prep gives students with an interest in technology a new route to college and career. It assures students a smooth progression from high school through at least two years of occupational education (associate degree or certification).



You need to be involved from the start. You are the most important player in career assessment, identifying students best served, course planning and communicating with parents and students.

What role do counselors play?

▲ *provide career awareness and exploration opportunities for students in all classes in middle school/junior high*

▲ *use the results of Career Occupational Preference Survey to assist students in identifying a career goal that will serve to guide the courses they select in high school and in formulating a six-year plan of study*

▲ *provide equitable participation for special population students*

▲ *present technical occupations as a viable and satisfying career option to all students and their parents*

▲ *educate parents about the opportunities available to students*

▲ *communicate with students to determine if they are satisfied with the plan of study they have selected*

▲ *provide data*

Counselors make a difference in the future of all students!

The Career Counseling Process

OCTOBER/NOVEMBER

Eighth grade:

▲ *Administer the Career Occupational Preference Survey to all eighth graders.*

▲ *Identify students with an interest in careers in business, industrial and engineering technology, and health and human services.*

▲ *Conduct orientations with students by cluster to familiarize them with career options. The orientations will feature speakers from business/industry and post-secondary institutions, and career videos.*

Ninth grade:

▲ *Administer Career Search Occupational Profile in applied classes and coordinate scoring.*

▲ *Conduct parent/student counseling sessions to review Career Search Occupational Profile results and to update, review or formulate plan of study.*

Tenth Grade:

▲ *Conduct Career Search Occupational Profile and counseling for new students and parents.*

JANUARY

Eighth grade:

▲ *Conduct career planning forums for students and parents to discuss career options and plans of study prior to pre-enrollment for ninth grade.*

Eleventh and Twelfth grades:

▲ *Review and update plans of study prior to pre-enrollment.*

Questions and Answers

What is Tech Prep?

Tech Prep is an innovative educational approach providing students with the academic and technical foundations for working and living in an increasingly technological world.

Tech Prep is a combined secondary and post-secondary program that:

- *leads to an associate degree or two-year certificate.*
- *provides technical preparation in at least one field in engineering technology, applied science, mechanical, industrial, or practical art or trade, or agriculture, health, or business.*
- *builds student competence in mathematics, science, and communication (including applied academics) through a sequential course of study.*
- *leads to placement in employment.*

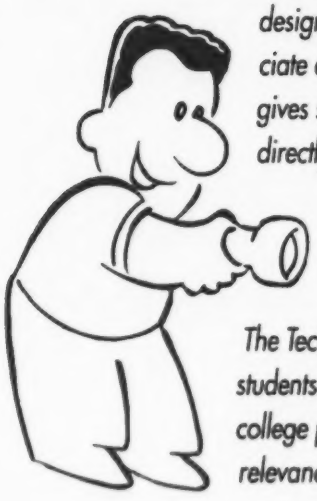
The Tech Prep process includes:

- *career education and assessment to help students and parents map out education plans leading to fulfilling and productive careers.*

- *math, science and communication courses that are "real world" and relevant.*
- *articulation, a term educators use to describe agreements made between high schools, vo-tech schools and community colleges that help students progress through the system without having to repeat courses. Students in articulated programs are able to receive college credit through Oklahoma City Community College while attending classes at Francis Tuttle Vo-Tech Center during their junior and senior years.*
- *collaboration between business/industry and education; academic and vocational education; and secondary and post-secondary education.*

Who should participate in the Tech Prep process?

The Tech Prep process is designed for students with an interest or aptitude in technical careers. The process is designed to guide students through at least an associate degree or post-secondary certification. It also gives students options to enter apprenticeships or go directly into the workplace after graduation.



How is Tech Prep unique?

The Tech Prep process cuts across "tracks" to give students the rigorous academic standards expected in college prep courses blended with the "real world" relevance of technical education.

Tech Prep provides flexible options that allow students to make changes along the way based on their interests, abilities, resources or level of confidence. Tech Prep, unlike a "general track," gives students the option to continually reach higher and farther.

Students with a blend of academic and technical skills are more employable and have more career options in a technological society. Our hope is that students will advance through at least an associate degree level of education. Students may also opt to pursue a four-year degree, apprenticeship or advanced technical training in a certified technical program.

Who WINS?

Ultimately, everyone benefits.

- *students win with a first-rate technical education, which has options for postsecondary technical training, an associate degree, or a bachelor's degree.*
- *employers win with employees who are well prepared to enter lifelong learning on the job. They get the chance to improve their competitive edge with an improved work force.*
- *high schools win with more motivated students engaged in a purposeful plan of study which, in turn, results in better-educated students completing their high school education.*
- *colleges win with better prepared students, improved enrollment, and more money to spend on increasingly sophisticated technical programs since fewer funds*

will be required for remedial and developmental education costs.

- *communities and states win with more fully developed human resources to fill the need for more highly trained technical workers.*
- *America wins with a world-class work force for a global market.*

As educators we are better able to "reach" students and make a positive difference in their lives. Tech Prep has had a proven effect on increasing the percentage of students pursuing higher education and progressing more quickly up the career ladder. The dropout rate has also decreased in other states where Tech Prep has been in place for several years.

In Richmond County, North Carolina for example, SAT scores have increased 47 points and school algebra courses have grown 60 percent in the past six years. Community college enrollment among Tech Prep students has jumped 28 percent. In Hamlet, North Carolina the percentage of students attending community college has increased from 24 to 46 percent, and the dropout rate has declined from 7.2 to 4.8 percent.

Business and industry gains a productive, qualified workforce. Instead of remediating employees, companies can focus their resources on becoming more competitive.

By creating a productive world-class workforce our communities are able to compete internationally and benefit economically.

What are the goals of Tech Prep?

The primary goal of Tech Prep is to prepare students for today's sophisticated technological careers by using the following strategies:

- *to encourage students to attain at least an associate degree or some other form of postsecondary certification.*
- *to upgrade student competency by using "real world" curriculum for teaching academic subjects.*
- *to prepare students for a smooth school-to-work transition.*
- *to foster collaboration between the schools, the workplace and the community.*
- *to coordinate the efforts of secondary and post-secondary schools so students can achieve maximum results in minimum time.*
- *to prepare students to be lifelong learners.*

What is the curricula?

In high school, Tech Prep students are taught academic subjects through a practical "real world" approach instead of the theoretical, abstract approach.

Core curriculum areas include math (algebra and geometry), science (biology, physics and chemistry), and communications. The curriculum also includes specialized courses selected according to the technical area the student is pursuing.

After high school, students participating in the Tech Prep process are able to move smoothly into the collegiate or certified courses related to their major fields of study. In articulated courses students are able to earn college credit while still in high school, a big money-saver in a time of rising tuition costs.

What happens to students after high school?

After graduating from high school, students who participate in the Tech Prep process have options. Many will pursue an associate degree with advanced standing credit earned while in high school. Many will earn an associate degree before going on to a major four-year university. Others will participate in apprenticeships or earn postsecondary certification in a technical field. And a few students will go directly to a job, ready to pursue additional education as needed throughout their lives.

How do employers fit into the process?

One of the most exciting aspects of Tech Prep is the role of business and industry. We seek their input in curriculum development, staff development, building public support, and employing students. They have a big stake in Tech Prep because after all, they are the ultimate beneficiary.

Curriculum

There are several differences in Tech Prep's curriculum approach:

- ▲ *applications-oriented method of teaching*
- ▲ *cooperative and teamwork learning*
- ▲ *an expectation that each student is capable of achieving specific competencies*
- ▲ *rigorous subject matter which blends the best aspects of academic and technical education*

Tech Prep addresses essential workplace issues including productivity, teamwork and flexibility through application-based instruction, cooperative learning and inter-disciplinary teaching.

Application-Based Instruction

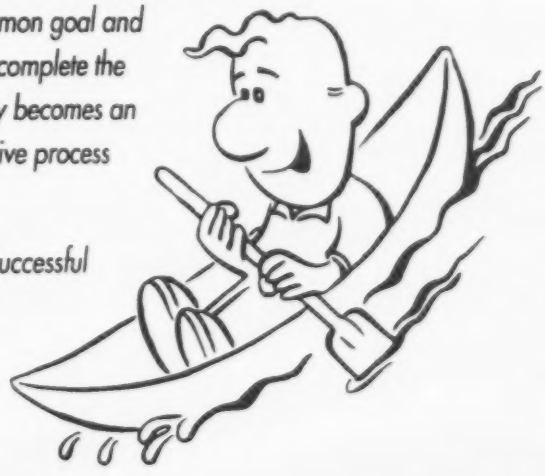
Findings from cognitive research indicate the most productive approaches to teaching provide learning experiences that take the student from concrete to abstract; specific to general; practice to theory and unfamiliar to familiar.

A curriculum of application-based instruction incorporates these concepts, making learning more understandable, achievable and attractive for many students. The curriculum offers many advantages:

- *it is active, not passive*
- *it offers meaning, relevance, immediacy and presence to concepts*
- *theory becomes practical*
- *understanding is deepened by experience*
- *students see concrete results of their competence*
- *more of the student's senses are involved*
- *knowledge becomes useful and important*
- *learning transfers more effectively to the student's everyday life.*

Cooperative Learning

Cooperative learning is the use of small groups in which students work together on academic material. Students are more task oriented while in their groups, working together toward a common goal and needing each other to complete the task. Learning this way becomes an active rather than passive process for the students.



The main elements of successful cooperative learning methods include: positive interdepen-dence, face-to-face

interaction, individual accountability, interpersonal and small group skills and group processing.

Interdisciplinary Teaching

The aim of Tech Prep is an integrated and articulated process in which students receive academic and occupational instruction combined as a total educational package. Providing education that equips students with theoretical knowledge and the capacity to translate that knowledge into tangible accomplishments will ultimately lead to a productive citizenry of lifelong learners.

Applied Academic Course Descriptions

Applied Biology/Chemistry

Sometimes known as ABC, this course is an integrated set of competency based materials that can be infused into existing courses or taught as a stand-alone course. ABC presents biology and chemistry in the context of work, home, society and the environment. It uses an applications-oriented approach emphasizing problem-solving, decisionmaking and hands-on lab experiences.

Content areas include: natural resources; water; air and other gases; plant growth and reproduction; continuity of life; nutrition, disease and wellness; life processes; synthetic materials; waste and waste management; microorganisms; and community of life.

Applied Communication

Applied communication encourages the development of reading, speaking and listening skills for the work environment. Emphasis is given to critical thinking, problem-solving and response writing. Students will work on projects independently and in teams. This curriculum helps students develop personal and career goals which are realistic.

Content areas include: communicating in the workplace; gathering and using information in the workplace; problem-solving strategies; starting a new job; communicating with co-workers; participating in groups; following

and giving directions; communicating with supervisors; presenting a personal point of view; communicating with clients and customers; making and responding to requests; communicating to solve interpersonal conflicts; evaluating performance; upgrading; retraining and changing jobs; and improving the quality of communications.

Applied Mathematics

Math is made relevant by showing how math skills are used in the workplace and by teaching problem-solving through hands-on, activity-centered environments.

APPLIED ALGEBRA I

Emphasizes the application of algebraic principles in a context of work-related situations. It includes video programs, problem-solving activities, calculators where appropriate, and hands-on laboratory activities.

Content areas include: algebraic expressions using integers, absolute value and simple vectors, solving linear equation and inequalities, using literal equations and formulas, ratios and proportions, graphing, radical, polynomial operations and factoring and rational expressions.

APPLIED GEOMETRY

Emphasizes the application of algebraic and geometric principles in the context of work-related situations. It is an integrated set of course materials that includes video,

print, hands-on laboratories and practical problem-solving activities.

Content areas include: measuring English and metric units, precisions, probabilities and statistics, lines and angles, two-dimensional shapes, scale drawings, three-dimensional shapes, right-triangle relationships, trigonometric functions and coordinate geometry.

Principles of Technology

The curriculum is designed to prepare students to fulfill the needs of tomorrow's workers, including developing an understanding of the principles on which their work is based and the ability to understand and adapt as their work changes.

Instructional units deal with mechanical, fluid, electrical and thermal systems. The curriculum is supported by 80 instructional videos and guides containing more than 50 demonstrations and 100 hands-on lab exercises.

Principles of Technology may be substituted for either physical science or applied physics.

PRINCIPLES OF TECHNOLOGY I

Content areas include: force, work, rate, resistance, energy, power and force transformers.

PRINCIPLES OF TECHNOLOGY II

Content areas include: momentum, waves, energy convertors, transducers, radiation, optical systems and time constants.

The College Connection

One of the most exciting aspects of Tech Prep and its appeal to students and parents is the college connection. There are three ways the Tech Prep process connects with a college education:

1. Tech Prep allows students to earn advanced standing college credit while still in high school. Students are able to advance more quickly toward completion of an associate degree and save on tuition costs!

Students who choose a Tech Prep pathway that includes courses at Francis Tuttle Vo-Tech Center in the industrial/engineering, business or health clusters may accrue credit hours toward an associate degree from Oklahoma City Community College. Here's how the articulation process works:

- *Students will be required to pay an advanced standing credit fee for the credit to be applied toward an associate degree.*
- *Advanced standing credit awarded to a student must be validated by successful completion of 12 or more semester hours at OKC Community College before being placed on the student's official transcript (as stated in Oklahoma State Regents for Higher Education policy and the OKC Community College Catalog).*

- *All coursework presented by a student must be no more than two years old.*
- *Once advanced standing credit has been validated and recorded, the credit is transferable on the same basis as if the credit has been earned through regular study at OKC Community College.*

Students who complete course work in the following FTVTC programs with a letter grade of A or B are eligible for advanced standing credit through OKC Community College: Applied Accounting, Banking and Financial Services, Drafting/CAD Fundamentals, Electronics Technology, Microcomputer Applications and Office and Secretarial Occupations.

2. Students who choose a pathway that leads to industrial /engineering, business or health courses AFTER high school graduation can receive college credit through OKC Community College for courses taken at Francis Tuttle Vo-Tech Center. A cooperative agreement between the two institutions allows adult students to earn an associate degree from OKC Community College by receiving academic instruction from college faculty and technical instruction from FTVTC faculty.

Post-secondary students enrolled cooperatively in the following programs may earn college credit toward an associate degree granted by OKC Community College:

Applied Accounting, Automation/Aerospace Manufacturing, Banking and Financial Services, CADD/CAM Specialist, CNC Machining Technologist, Instrumentation and Control Technician, Microcomputer

Applications, Microcomputer Technician, and Office and Secretarial Occupations.

3. Students who receive an associate degree from OKC Community College may advance smoothly into a four-year baccalaureate degree plan through the University of Oklahoma or the University of Central Oklahoma. Students who continue their technical education at the University of Oklahoma may pursue a bachelor of science degree in electrical engineering, a bachelor of science degree in computer engineering or a bachelor of business administration degree in management information systems.

The University of Central Oklahoma provides OKC Community College students the opportunity to pursue a bachelor of science in training and development.

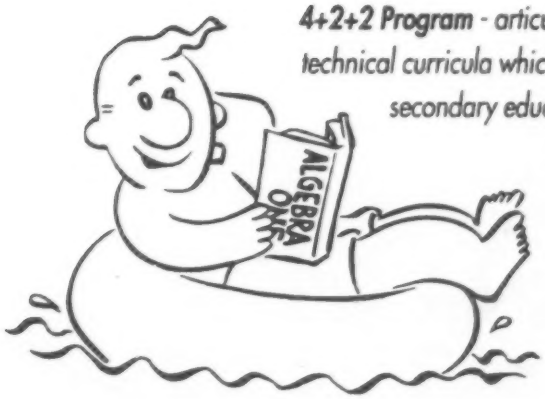
Definitions

Articulation - *a term educators use to describe agreements made between high schools, vo-tech schools and community colleges that help students progress through the system without having to repeat courses.*

Advanced Standing - *a process through which a student may be eligible to receive credit for all or part of a course due to competencies mastered previously. The determination of advanced standing is made by each community college upon a student's enrollment in a program. Advanced standing avoids unnecessary duplication of instruction and student learning.*

Applied Academics - *courses such as principles of technology, applied mathematics, applied science and communications focus on subject-matter concepts as they are applied to real-world problem solving.*

CORD - *Center for Occupational Research and Development has developed the applied academics curriculum.*



4+2+2 Program - *articulated, competency-based, technical curricula which links the four years of secondary education with the first two years of post-secondary education at the community college or vo-tech and two years necessary to complete a bachelor's degree.*

Internship *- refers to work-based learning in which a partnership is established between the community college, vocational-technical center, an employer or business, and the student for the purpose of providing practical education to the student through productive work opportunities. A signed agreement among all parties outlining a student's cooperative learning plan is a necessary component of an internship.*

Mentoring *- a deliberate pairing of a more skilled or experienced person with a lesser skilled or experienced one, with the agreed-upon goal of having the lesser skilled person grow and develop specific competencies.*

Work-based Learning *- a general term encompassing cooperative vocational education, internship, school-supervised work experience, on-the-job training, employee and management training, mentoring and apprenticeship.*

Youth Apprenticeship *- programs that combine on-the-job learning with classroom instruction, that offer a bridge between secondary and post high school training/education, and that lead to certification of mastery of work skills.*

Challenges

Understanding and explaining the Tech Prep process isn't easy. Here are a few of the challenges we face:

1. MARKETING: *Tech Prep is new and tough to explain. Informing parents, employers and colleagues should spark interest and support. Students should see Tech Prep as an exciting new way to achieve education and career goals.*

2. PROFESSIONAL DEVELOPMENT: *We all need on-going training on how Tech Prep works and our role in the process. The best staff development opportunities give us a chance to interact with educators and employers from outside our areas of specialization.*

3. COMMUNICATION: *Collaboration is the buzzword today, and Tech Prep requires lots of it! All the key players must be involved in breaking down the traditional barriers between high schools, vocational schools, higher education and employers.*

4. CURRICULUM DEVELOPMENT: *Integrating curriculum between academic, technical, high school and college courses requires patience and team work. The new curriculum gives students with a career goal in mind the ability to move through the system without any hitches or repetition and with an understanding of how all learning interrelates.*

5. CAREER AWARENESS: *Students need to begin preparing for participation in the Tech Prep process long*

before the process begins! By helping middle school students identify their interests and by sharing ideas for potential careers based on those interests, students and parents have a chance to make smarter course choices.

6. EMPLOYER INVOLVEMENT: *Tech Prep must have the support of business and industry. Employers have the opportunity to be involved in Tech Prep by telling us the skills their employees need, serving as guest speakers, providing job shadowing and apprenticeship opportunities and indentifying emerging careers.*

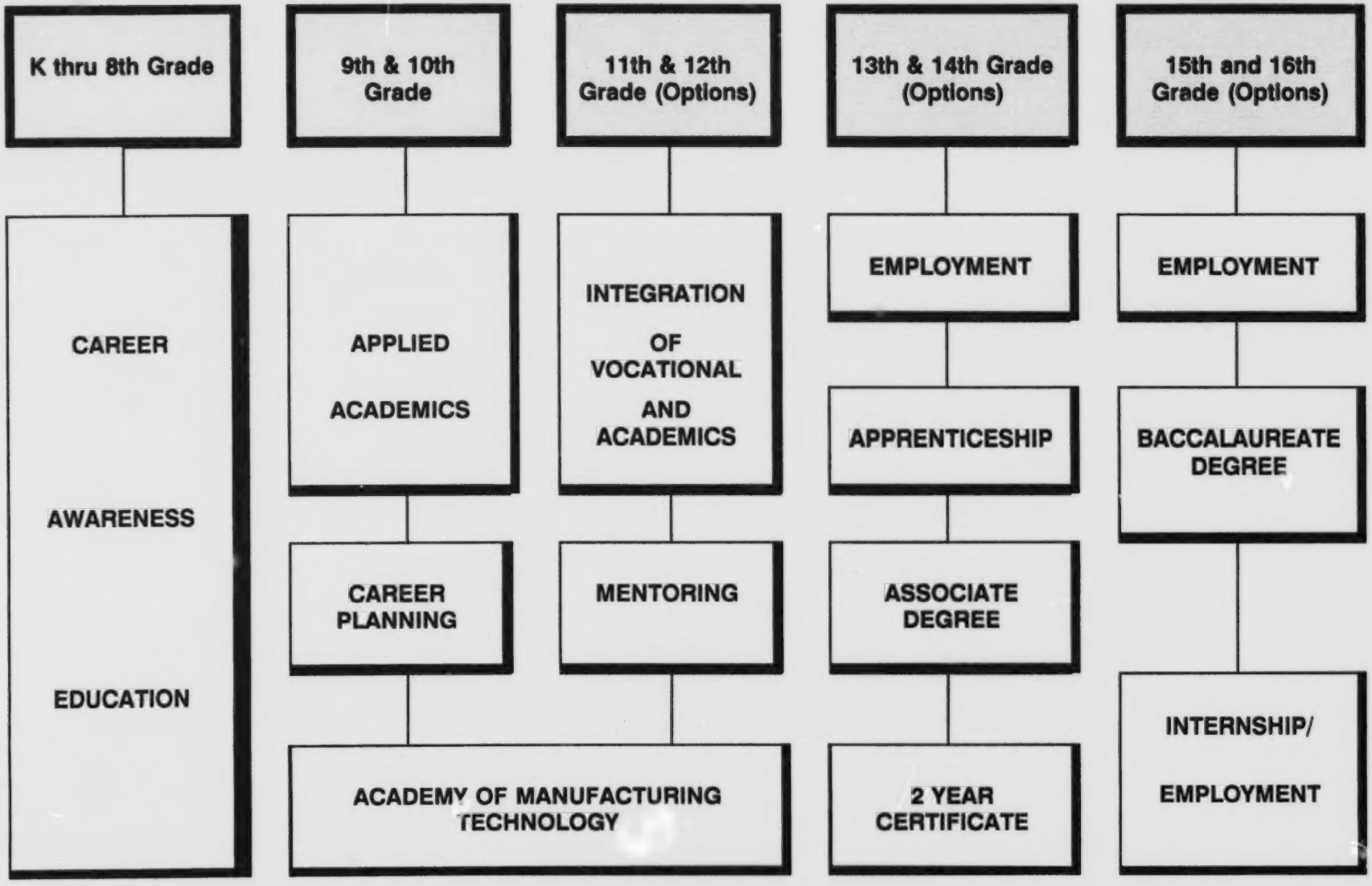
7. QUALITY AND ACCOUNTABILITY: *Tech Prep is a quality process that requires higher performance standards from students and educators. Tech Prep is improving student placement rates, academic outcomes and dropout rates. It provides a method for continually improving the way we prepare students for fulfilling careers and lives.*

Appendix

- *CREATE's Tech Prep Model*
- *CREATE's Directory*
- *CREATE's Tech Prep Committees*
- *National Career Development Guidelines*
- *Western Heights Tech Prep and Graduation Requirements*
- *Western Heights Four-year Plan of Study*
- *Western Heights Tech Prep Cluster Plans*
- *Edmond Tech Prep Plan of Action*
- *Putnam City Tech Prep Implementation Plan*
- *K-12 Career Development Plan*
- *Tech Prep Carl Perkins Regulations*

CREATE'S 4 + 2 + 2

Consortium to Restructure Education through Academic and Technological Excellence



CREATE'S CONSORTIUM
DIRECTORY OF CONTACT PERSONNEL

Francis Tuttle Vo-Tech Center

Ms. Jan Powell (405) 720-4256	Instructional Services chairperson, coordinates Steering Committee
Ms. Carla High (405) 720-4380	Tech Prep federal proposal project director and local coordinator of CREATE's institutions, coordinates Steering, Curriculum, Student Services, Staff Development and Business and Industry committees
Ms. Carol Adams (405) 720-4268	Tech Prep specialist responsible for the creation and dissemination of information, coordinates Public Relations, Staff Development and Student Services committees
Ms. Pat O'Hara (405) 720-4119	Tech Prep secretary to Carla High and Carol Adams

Oklahoma City Community College

Ms. Carolyn Goad (405) 682-1611, Ext. 762	Program Development Officer, Tech Prep coordinator for OKCCC
Mr. Chan Hellman (405) 682-1611, Ext. 240	Tech Prep Evaluator/Researcher

Edmond Public Schools

Ms. Kim Wilson (405) 340-2838	Tech Prep coordinator and career specialist for Edmond Public Schools

TECH PREP COMMITTEES
93-94

Leadership (Institutional superintendents) - Make decisions regarding direction of and commitment to Tech Prep.

Randall Raburn	Edmond
Sharon Lease	Western Heights
Randy Dewar	Putnam City
William White	Deer Creek
Bruce Gray	FTVTC
Bob Todd	OKCCC

Steering (Curriculum directors and building principals - Plan and outline implementation of Tech Prep.

Linda Everett, Kim Wilson, Larry Maxwell, Charles Woodham, Roberta Gaston	Edmond
Frank Hughes	Western Heights
Harold Greenwood, Cheryl Cavanaugh	Putnam City
Steve Davis	Deer Creek
Jan Powell, Carla High	FTVTC
Carolyn Goad	OKCCC

Student Services (Guidance counselors) - Make decisions regarding career education.

Jeff Young, Pat Hammet, Darla Cardwell, Ron Sizemore, Janie Bates, Kim Wilson	Edmond
Gwen Jones	Western Heights
Christy Baker, Suzanne Rickerts, Linda Looper, Cheryl Cavanaugh, Carolyn Jacob, Mary Ann Gardner	Putnam City
Mary Greenwood, Danny King, Carla High, Carol Adams,	FTVTC
George Maxwell, Malcolm Myers, Joanne McMillen	OKCCC
Judi Shelton	Deer Creek
Belinda McCharen	ODVTE

Evaluation (Research specialists) - Determine the instruments to be used and methods for data collection.

Kim Wilson	Edmond
Gwen Jones	Western Heights
Harold Greenwood	Putnam City
Shari Parish, Jan Powell	FTVTC
Annmarie Shirazi, Chan Hellman	OKCCC

TECH PREP COMMITTEES (con't)

Curriculum (Instructors and curriculum specialists) - Make decisions regarding applied academics curriculum. A subcommittee exists for math and science.

Susie Shumate, Carole Barsaloux, Kim Wilson	Edmond
Vickie Vaughan	Western Heights
Linda Bailey, Karen Bullock, Jan Watson, Colleen Rau	Putnam City
Bob Burroway, Carla High	FTVTC
Gus Pekara, Barbara Vrana, Carolyn Goad	OKCCC

Public Relations (Public relations specialists) - Determine marketing strategies to all audiences and the tools to be used with each audience.

Kim Wilson	Edmond
Connie Blaney	Putnam City
Susan Hardy-Brooks, Carol Adams	FTVTC
Pat Stuckey	OKCCC

Staff Development (Vocational and academic instructors and curriculum specialists) - Determine staff development needs of the Consortium and design activities to meet these needs.

Kim Wilson	Edmond
Donna Biggs, Vickie Vaughan	Western Heights
Colleen Rau	Putnam City
Carla High, Mitch Pursell, Richard Jones	FTVTC
Carolyn Goad	OKCCC

FT Internal - Determine needs of FTVTC regarding Tech Prep.

Carol Adams
Mitch Pursell
Debbie Belford
Bob Landers
Susan Hardy-Brooks
Richard Jones
Carla High
Mary Greenwood
Jan Powell

NATIONAL CAREER DEVELOPMENT GUIDELINES AND COMPREHENSIVE GUIDANCE AND COUNSELING PROGRAM RESOURCES

The Student Competency Categories of the National Career Development Guidelines

1. Know the importance of self concept and learn the skills to maintain a positive one.
2. Interact positively with others.
3. Understand change, growth and transitions.
4. Understand the relationship between education and career opportunities.
5. Develop positive attitudes and skills to participate in work and lifelong learning.
6. Locate, evaluate, and interpret career information.
7. Understand and promote job seeking and changing job skills.
8. Understand how society's needs and the economy influence the structure of work.
9. Learn to make decisions.
10. Understand the interrelationship of work and life roles.
11. Understand changes in male/female roles and their impact on occupations.
12. Understand career planning and be able to make transitions.

WESTERN HEIGHTS HIGH SCHOOL

REQUIREMENTS FOR GRADUATION
(44 TOTAL CREDITS NEEDED TO EARN A DIPLOMA)

LANGUAGE ARTS - 9 Credits
ENGLISH 4 Yrs. - 8 Credits

ORAL-COMMUNICATION
(1 Semester) - 1 Credit

SOCIAL STUDIES - 8 Credits
OKLA. HISTORY - 1 Credit
GEOGRAPHY - 1 Credit
AMER. HISTORY - 2 Credits
WORLD HISTORY - 2 Credits
GOVERNMENT - 1 Credit
ECOMONICS - 1 Credit

MATH/SCIENCE (Option 1)
MATHEMATICS - 6 Credits
(2 must be Algebra I)

SCIENCE - 4 Credits
(Laboratory Science)

MATH/SCIENCE (Option 2)
MATHEMATICS - 4 Credits
(2 must be Algebra I)
SCIENCE -6 Credits
(Laboratory Science)

PHYSICAL EDUCATION - 1 Credit
(Participation in band, after school sports, Encore or Finale will fulfill this credit.

HEALTH - 1 Credit

FOUR YEAR TECH PREP PROGRAM

9th GRADE
ENGLISH I
OKLAHOMA HISTORY -One Semester
GEOGRAPHY -One Semester
APPLIED MATH I (TP) Algebra/Geometry
APPLIED BIOLOGY/CHEMISTRYI (TP)
OR PRINCIPLES OF TECHNOLOGY
PHYSICAL EDUC. - One Semester
HEALTH - One Semester
APPLIED COMMUNICATIONS
- One Semester
ELECTIVE - One Semester

10th GRADE
ENGLISH II
AMERICAN HISTORY
APPLIED MATH II (TP)
Algebra /Geometry
APPLIED BIOLOGY/CHEMISTRY II (TP)
OR PRINCIPLES OF TECHNOLOGY II
(TP PHYSICS)
ELECTIVE OF CHOICE
ELECTIVE OF CHOICE

11TH GRADE
ENGLISH III
WORLD HISTORY
ALGEBRA II
VO-TECH 6 CREDITS
(THREE HOURS PER DAY)
Students who choose not to attend Vo-Tech in the 11th grade could take 12 additional credits at the high school. The importance of choosing these classes carefully cannot be over emphasized.

12TH GRADE
ENGLISH IV
GOVERNMENT (One Semester)
ECONOMICS (One Semester)
ELECTIVE OF CHOICE
(Suggest highly Pre-Calculus or Advanced Science) Vo-Tech 6 credits (3 Hrs. per day)
The Tech Prep Program the Senior year could be an apprenticeship program at a business.

WESTERN HEIGHTS HIGH SCHOOL TENTATIVE SIX YEAR PLAN OF STUDY

Name _____ Occupational Major _____ Date _____

Postsecondary Major _____

REQUIREMENTS	GRADE 9		GRADE 10		GRADE 11		GRADE 12		GRADE 13		GRADE 14	
	Courses	Credits	Courses	Credits	Courses	Credits	Courses	Credits	Courses	Credits	Courses	Credits
English (4 years) 1 Semester Speech/ Communication	1.											
Mathematics *(3 years) Opt 1 (2 years) Opt 2	2.											
Science (2 years) Opt 1 (3 years) Opt 2	3.											
Social Studies 1 Sem. OK History 1 Sem. Geography 1 Yr. Amer. History 1 Yr. World History 1 Sem. Government	4.											
	5.											
1 Sem. Economics	6.											
1 Sem. Physical Ed 1 Sem. Health	7.											

*one year must be Algebra I

CREDITS EARNED (by year)

SUMMER SCHOOL

Year	Courses	Credits

NIGHT SCHOOL

Year	Courses	Credits

Grand Total Credits _____

TECH PREP CLUSTERS

TRADE/ENGINEERING TECHNOLOGY

HEALTH/HUMAN SERVICES

BUSINESS

Western Heights High School

9th Grade
- Algebra I - TP
- Physical Science
- Applied Communication

10th Grade
- Geometry - TP
- Physics I - TP

9th Grade
- Algebra I - TP
- Biology I - TP
- Applied Communication

10th Grade
- Geometry - TP
- Chemistry I - TP

9th Grade
- Algebra I - TP
- Physical Science
- Applied Communication

10th Grade
- Geometry - TP
- Physics I - TP

Francis Tuttle Vo-Tech Center

(Free Enrollment Transportation for 11th and 12 Grades)

- (A1) Auto Collision Technology (2 yr)
- (A1) Auto Service Technology (2 yr)
- * (B1) Drafting/CAD Fundamentals (1 yr)
- (C1) Electronics Technology
- (D1) Machine Shop (2 yr)

Post-Secondary (Year 13)
(Enrollment Fee)

- (C2) Auto/Aerospace Technician
- * (B2) CADD/CAM Technician
- (D2) CNC Machining Technician
- (C2) Instrumentation and Control Technician
- (C2) Microcomputer Technician

- (E1) Health Science Technology I (1yr)
- (E2) Health Science Technology II (1 yr)
- (F1) Child Care (2 yr)
- (G1) Food Service Certification (2 yr)

- (E3) Practical Nursing
- (E3) Respiratory Therapy Technician

- (H1) Applied Accounting (1 yr)
- (I1) Banking and Financial Services (1 yr)
- (J1) Office & Secretarial (1 yr)
- (K1) Microcomputer Applications (1 yr)

(Above programs are available as post-secondary)

Oklahoma City Community College

Associate Degree Program

- (C3) Industrial Electronics
- (C3) Automated/Aerospace Manufacturing
- * (B3) Computer-Aided Design/Drafting
- (C3) Electronics
- (A2) Automotive Technology
- (D2, C3) Manufacturing Technology
- (C3) Microcomputer Support Technology

- (E3) Pre-Dentistry/Pre-Medicine
- (E3) Emergency Medical Technology
- (E3) Gerontology Technology
- (E3) Health Psychology
- (E3) Nursing
- (E3) Occupational Therapy Assistant
- (E3) Physical Therapist Assistant
- (E3) Pre-Pharmacy
- (E3) Psychology
- (G2) Food Service Management
- (F2) Child Development

- (K2) Computer Science
- (J2) Office Admin.
  - *- Legal Secretary*
  - *- Office Auto. Spec.*
  - *- Admin. Secretary*
- (I2, H2) Finance

*Indicates alphabetic/numeric sequence path for Associates Degree.

PROJECTION
EDMOND PUBLIC SCHOOLS

TECH PREP CLUSTERS AND APPLIED ACADEMICS

ENGINEERING* TECHNOLOGY	HEALTH/HUMAN* SERVICES	BUSINESS*
	HIGH SCHOOL	
9th GRADE	9TH GRADE	9TH GRADE
Applied Algebra I Physical Science/ Biology AA/Biology	Applied Algebra I Biology AA	Applied Algebra I Physical Science/ Biology AA/Biology
10th GRADE	10TH GRADE	10TH GRADE
Applied Geometry Physics PT I	Applied Geometry Physics PTI/Elective	Applied Geometry Physics PT I
11th GRADE	11TH GRADE	11TH GRADE
Algebra II Physics PT II	Algebra II Physics PT II/Elective	Algebra II Physics PT II

Electives: Biology I, Biology II, Chemistry, Physics, Environmental Science, Zoology, Physiology/Anatomy, or as specified at the individual high schools.

FRANCIS TUTTLE VO-TECH CENTER

Auto Collision Technology Auto Service Technology	Allied Health Careers Allied Health Careers II	Applied Accounting Banking and Financial Services Office & Secretarial Microcomputer Applications
Drafting/CAD Fundamentals Electronics Technology Machine Shop	Child Care Food Service Certification	

POST SECONDARY (YEAR 13)

Auto/Aerospace Technician CAD/CAM Technician CNC Machining Technician Instrumentation and Control Technician Microcomputer Technician	Practical Nursing Respiratory Therapy Technician	(Above programs are available as post-secondary)

OKLAHOMA CITY COMMUNITY COLLEGE ASSOCIATE DEGREE PROGRAMS (ARTICULATION WITH FRANCIS TUTTLE)

Industrial Electronics Automated/Aerospace Manufacturing Computer-Aided Design/Drafting Electronics Automotive Technology Manufacturing Technology Microcomputer Support Technology	Pre-Dentistry/Pre-Medicine Emergency Medical Technology Gerontology Technology Health Psychology Nursing Occupational Therapy Assistant Physical Therapist Assistant Pre-Pharmacy Psychology Food Service Management Child Development	Computer Science Office Administration legal secretary office auto. spec. admin. secretary Finance

OKLAHOMA UNIVERSITY BACCALAUREATE DEGREES (ARTICULATION WITH OCCC)

UNIVERSITY OF CENTRAL OKLAHOMA BACCALAUREATE DEGREES (ARTICULATION WITH OCCC)

*The engineering technology, health/human services and business career clusters are three suggested educational pathways for students. However, the Applied Academic Curriculum can be used in other career pathways as an option to the traditional math and science classes.

TECH PREP IMPLEMENTATION PLAN
PUTNAM CITY SCHOOLS

Career Assessment

All eighth grade students will receive the COPS career assessment instrument during the first semester. This will be administered by the eighth grade counselors through academic classes. The COPS assessment is a self-scored instrument. One day will be allocated for giving the assessment, with one subsequent day for the self-scoring and interpreting. The results of the COPS assessment will be used to group students in occupational clusters of interest. Group meetings will be scheduled for each cluster area in which students will meet with representatives of business and industry in the appropriate clusters and with counselors to discuss six-year plans of study. Those interested in pursuing a Tech Prep cluster will be shown a six-year plan which may be revised at any time. Parents will also be encouraged to attend these meetings.

Students enrolled in applied academics or those pursuing the Tech Prep career pathway in grades nine and ten will receive the Career Search career assessment instrument annually. This will be given during the first semester of each year. The results of this instrument will be shared with the student during a scheduled 30-minute counseling session each year. Eleventh and twelfth grade Tech prep students will receive individual counseling sessions to confirm or revise their plans of study. Information concerning the counseling session, with an invitation to attend will be mailed to all parents prior to the session. The high school counselors will be responsible for coordinating these sessions, mailing the information to parents and conducting the 30-minute session with their respective students. The career coordinator from CREATE's Consortium will be available to assist.

Recruitment

Presentations to all eighth grade students through academic classrooms will be made annually. These will be done by the eighth grade counselors in coordination with the recruiter from CREATE's Consortium.

A designated person from each high school will make a presentation annually to the parent's orientation meeting.

All students enrolled in an applied academics class will be provided with an opportunity to tour Francis Tuttle Vo-Tech Center to receive an explanation about all program areas available.

Curriculum

The six-year plans of study will include the applied academics classes to be taken in ninth and tenth grades. All students pursuing the Tech Prep career pathway will be encouraged to take Applied Algebra in ninth grade and Applied Geometry in tenth grade. The same students will be placed in the appropriate science courses based upon their career interests. Students with an interest in Health/Human Services will be shown a plan which includes Applied Biology/Chemistry I and II. Those interested in the Technology/Trade cluster will have Principles of Technology I and II as their science credits in ninth and tenth grades. The students pursuing the Business cluster will take the Applied Biology/Chemistry I curriculum in ninth and the Principles of Technology in tenth grade. One semester of the Applied Communications curriculum will be offered to students in ninth or tenth grades as a "speech" credit. This plan of study is depicted below:

TRADE/ENGINEERING	***HEALTH/HUM. SERV.***	***BUSINESS***
9th Grade	*9th Grade*	*9th Grade*
Applied Algebra I	*Applied Algebra I*	*Applied Algebra I*
Prin. of Tech. I	*Applied Bio/Chem I*	*Applied Bio/Chem I*
Applied Comm (1 sem.)	*Applied Comm (1 sem.)*	*Applied Comm (1 sem.)*
10th Grade	*10th Grade*	*10th Grade*
Applied Geometry	*Applied Geometry*	*Applied Geometry*
Prin. of Tech II	*Applied Bio/Chem II*	*Prin. of Tech I*

All students will be shown a plan of study which includes Algebra II during their eleventh grade year. Algebra II will be revised to include application into the existing curriculum. This will provide a true, seamless pathway for students.

A team-teaching opportunity will be developed for any high school that wishes to participate. A two-hour block will be scheduled in which the Applied Algebra and Principles of Technology instructors team-teach to a group of students. The math and science curriculum will be integrated to support each other. Students will receive one credit of math and one of science.

Business and Industry Involvement

8th Grade

Representatives from business/industry will participate in the presentations to eighth grade students concerning Tech Prep options. They will also participate in the presentation to parents of prospective ninth and tenth grade students during the parent orientation meetings.

9th Grade

Business/industry representatives will be scheduled into the applied academics classrooms to speak to students regarding career opportunities. Representatives from a variety of careers will be included.

10th Grade

Job-shadowing opportunities will be provided to Tech Prep students in career areas of choice. At least one field trip per semester will be scheduled for the classes in which they visit and tour industries that relate to the occupational cluster in which they are enrolled.

11th Grade

Students will have the opportunity to participate in the business partnership program designed for their career clusters. The students choosing to enroll at Francis Tuttle Vo-Tech Center during their junior year will have the opportunity to take advantage of these partnerships, if they meet the required criteria. In the partnership program, students may participate in the vocational programs offered at Francis Tuttle. Upon completion of a predetermined level of expertise, their vocational class would be held on the job site. Students will receive an hourly wage from the business. All students participating in the partnership program must maintain predetermined grade point averages and attendance rates. Some will be eligible for summer employment in the same companies.

12th Grade

Students will continue their vocational training and partnership program begun the previous year. Some may be eligible for continued employment through post-secondary endeavors.

EDMOND PUBLIC SCHOOLS
APPLIED ACADEMICS AND CAREER EDUCATION
PROJECTED PLAN OF ACTION

GRADE AREA	ACTIVITIES
K-6TH - AWARENESS	*Career Development Classroom Activities *Seemore Opportunities, "The SOICC Career Mouse" Career Days *Seemore Opportunities Coloring Sheets *Career Counselor File Teacher Inservice Speakers - Partners Tours Integrated Studies
7TH - EXPLORATION	*Career Quest Game *Career Gallery **It's A New World* Video *SOICC Contest *Career Development Classroom Activities Teacher Inservice Speakers - Partners Tours Integrated Studies
8TH - EXPLORATION	*COPS, CAPS, AND COPES* Career Assessments Career Fair Speakers - Partners Tours Career Counselor Education Pathway Presentation *Career Development Classroom Activities Four-Year Plan (one-to-one counseling) *PEAK Materials Tours Speakers Teacher Inservice Learning Styles Assessment Integrated Studies
9TH-12TH - PREPARATION	**Career Directions* Magazine Technical Vocational School *Career Development Classroom Activities Career Counseling (one-to-one) *PEAK Materials Tours Poster Contests Teacher Inservice Consortium Instructors' Monthly Meetings District Instructors' Meetings Pre/Post Tests to Applied Math & Science Classes Implementation of Advisory Board Coordination with Career Teachers Coordination with Counselors Career Search/Interest Inventory **Through the Jungle* Job Search Guide (Continued on the next page)

*May be obtained from the Oklahoma Department of Vo-Tech Education, Stillwater, OK

EDMOND PUBLIC SCHOOLS
APPLIED ACADEMICS AND CAREER EDUCATION
PROJECTED PLAN OF ACTION

GRADE AREA	ACTIVITIES
9TH-12TH - PREPARATION	(Continued from the previous page) **Careers for the 21st Century* Videos Speakers - Partners Career Awareness Month(s) Continued Teacher Education Open House Representative Civic Organizations - PR Articulation with Francis Tuttle Vo-Tech Center Articulation with OCCC Articulation with OU Coordination with Curriculum Specialist Coordination with Media Specialist Identification of Educational Pathways College Search Career Exploration Applied Algebra Applied Geometry Biology AA Physics PT I & II Applied Communication(?) Career & Life Skills Needs Assessment Survey to Parents and Students Science and Math Needs Assessment Surveys Coordination with Gifted and Talented Specialist ASVAB

*May be obtained from the Oklahoma Department of Vo-Tech Education, Stillwater, OK

Required Elements of a Tech Prep Program

Under Title III

At a minimum, a Tech Prep Program must...

1. lead to an associate degree or two-year certificate

2. provide technical preparation in at least one field of engineering technology, applied science, mechanical, industrial or practical art or trade; agriculture, health, or business

3. build student competencies in mathematics, science and communications through a sequential course of study

4. lead to employment placement

7 Required Elements

- Articulated Agreement
- Appropriate Curriculum Design
- Curriculum Development
- In-service Teacher Training
- Counselor Training
- Equal Access for Special Populations
- Preparatory Services

Source: **AVA Guide to Federal Funding for Tech Prep**

The contents of this handbook were developed under a grant from the Department of Education. However, those contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.

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MARKETING

Like any other educational initiative, Tech Prep succeeds best in a climate of community support and understanding. Because it so drastically changes previous stereotypes and expectations of the typical approach to education, communication of the process and clarification of Tech Prep goals are extremely important. The marketing component must develop effective techniques for communicating Tech Prep internally and externally.

MARKETING STRATEGY

The first step in an effective marketing strategy is to determine what the central message is and decide on a mission or goal statement. For example, CREATE's marketing goal is summed up in this statement: "To encourage targeted audiences to respond positively and to promote student enrollment in the Tech Prep process." This statement needs to be clear and to the point and is the focus of everything that is done and said in marketing communications.

TARGET AUDIENCES

Secondly, the mission statement must be supported by specific objectives or submessages that will help people understand your main message. Following are some of CREATE's key messages that were important in designing our Tech Prep marketing/communications plan:

Students
Tech Prep is a fun, exciting way to learn and it opens doors for any future students choose.

Educators
Tech Prep is the best educational choice for many students. Helping students into Tech Prep requires the active involvement of teachers, counselors and administrators.

Business/Industry
Tech Prep is preparing students to become productive workers in the technology-based workplace. Better prepared students become better workers who improve company productivity and economic development in the community.

Parents and Community
Tech Prep provides children many educational and career options in an increasingly technical world.

The responses to the following five basic questions guided our marketing strategy.

1. What is the specific message this approach is to get across?
2. Who is the target audience (students, educators, business, parents)?
3. What is the best method (presentation, printed material, media, promotional events/activities)?
4 Who should be the messenger to deliver the news (educators, business people, students)?
5. How will you evaluate the results (records, surveys)?

Both internal and external marketing committees were formed, taking advantage of our marketing resources, including marketing experts, educators, parents, and students. These committees provide ideas, resources, and direction and assist in setting time lines for long-term goals. We also received input from the public relations representatives of our cooperating college, school districts, and vocational institutions.

Once goals and supporting objectives were established, we concentrated on finding the best approach or strategy. We chose the events, activities, and promotional items that we felt best conveyed our message.

MARKETING ACTIVITIES

Building a positive image for Tech Prep requires broad-based support. This type of campaign requires a wide variety of approaches and techniques. Obviously, all of these methods will not be appropriate for all audiences and you will want to choose the activity that will best inform and educate the specific target group. Our marketing strategies fall into four categories:

Media
Print - newspaper articles, posters, brochures, handbooks, newsletters
Non-print - promotional campaigns, promotional items

Visitations/Demonstrations
Tours, focus groups, on-site staff development

Presentations
Guest speakers, student testimonials, videos

Promotional Events/Activities
School/business partnerships, parent meetings and special events at school, and state and national conferences

STATEWIDE MARKETING

In addition to local marketing efforts, CREATE is involved in a statewide Tech Prep marketing plan. The ten funded sites in Oklahoma contributed $1,000 each to developing a Tech Prep marketing package that would be generic in nature and transportable throughout the state. The money allocated was used to hire a public relations firm to produce the following:

* 15 second T.V. commercial which can be adapted to radio
  actually produced 30 second T.V. commercial which was adapted for radio, shown in OKC market area
* Press materials...background on program, news release for local use, success stories and a business feature story emphasizing how Tech Prep will contribute to building America's workforce of the future
  actually sent background information press release with T.V. and radio spots to each site with letter for general manager to be personalized, article printed in OKC area about FTVTC and Metro Tech
* Op Ed piece for local use by superintendents
  actually gave WordPerfect diskette with three files: counselor brochure, college connection/articulation flyer idea and business & industry information sheets for personalization to consortium
* Coordinated/instructional piece containing recommendations on how to effectively use the material
  each item delivered can be customized by the local consortium
* Script for video, with production coordinated through FTVTC
  actually created video by Rich Baim, Patty Crabbe and Alan Krahl, disseminated to 10 Tech Prep sites
* a canned speech
  actually delivered to Tech Prep Directors on October 12, 1993

It is anticipated that this cooperative effort will expand to include the following services:

* Statewide Tech Prep information network
* Standardization of Tech Prep materials
* Mutual support through the sharing of success stories/testimonials
* Statewide Tech Prep calendar

The materials included in the statewide marketing package appear at the end of this section.

An overview of CREATE's marketing plan follows, along with a chronological listing by focus audience of specific marketing strategies. An order form for various promotional items is also included.

Tech Prep Marketing Plan

Goal: To increase involvement in Tech Prep programs among parents, students, educators and the communities we serve.

Parents

Key Message: Tech Prep provides their children many education and career options in an increasingly technical world.

1. Distribute a letter to parents of students placed in Applied Algebra that explains the benefits and rationale of the Tech Prep concept.
(Year 1)

2. Provide information for parents during mid-high and high school Open House events. A booth could be set up or information could be distributed in the Applied Algebra, Principles of Technology, or math and science classes.
(Year 1)

3. Communicate with Parent Teacher Organizations by distributing information for publication in PTO newsletters, and by making presentations at PTO meetings.
(Ongoing)

4. Provide information to OKCCC, OU and FTVTC for distribution to parents during College Nights at high schools.
(Ongoing)

5. Utilize direct mail to encourage parents to attend 30-minute career counseling session for 9th and 10th grade students in applied academics.
(Year 2 - Ongoing)

6. Place articles about student successes in Tech Prep programs in school district newsletters and area media.
(Ongoing)

7. Conducted parent focus group to identify marketing messages. (Year 2)

8. Developed "Excel" video which portrays Tech Prep options. (Year 2)

9. Participated in statewide mass media marketing effort targeting parents. Effort included TV and radio PSA, news releases, speech script, and video script. (Year 2)

10. Develop career cluster videos and print support for use in parent forums. (Year 3)

11. Conduct parent forums in sending schools for parents of students whose career assessments indicate an interest in Tech Prep careers. (Year 3)

Students

Key Message: Tech Prep opens doors for any future students choose. Tech Prep is a fun, exciting way to learn.

1. Design a high impact logo using neon colors and a modern look for use on promotional and print materials.
(Year 1))

2. Produce a four-color poster on Tech Prep to hang in mid-high and high school classrooms.
(Year 1)

3. Mail a postcard to students in eighth and ninth grade prior to pre-enrollment time encouraging them to think about enrolling in a Tech Prep program.
(Ongoing)

4. Visit all 8th grade math or science classes to inform students about Tech Prep Options. (Ongoing)

5. Distribute pencils, sunglasses and t-shirts in schools to increase the visibility of Tech Prep among students.
(Ongoing)

6. Conducted Career Search profile and 30-minute counseling sessions for students in 9th and 10th grade applied academics courses. (Year 2)

7. Conducted student tours. (Ongoing)

8. Developed visual depiction of Tech Prep pathways for students. (Year 2)

9. Laid groundwork for Tech Prep student evaluation. (Year 2)

10. Designed cluster sheets and six-year plans of study for student advisement and planning. (Year 2)

11. Created plan for utilizing COPS as a method of targeting 8th grade students with an interest in Tech Prep careers. (Year 2)

12. Refine and expand the use of cluster sheets and six-year plans of study. (Year 3)

13. Develop pilot banking internship. (Year 3)

14. Implement COPS assessment plan. (Year 3)

Educators

Key Message: Tech Prep is the best educational choice for many students in the middle 50 percent of their class. Helping students into Tech Prep requires the active involvement of teachers, counselors and administrators.

1. Host Tech Prep Days for counselors and principals to familiarize them with Tech Prep and the role it can play in helping students succeed. (Year 1)

2. Revised a Q &A handout for school officials that provides quick, easy responses to questions they might have. These have been included in the Counselor Handbook. (Year 1-2)

3. Create and distribute a Counselors Handbook with course plans and scheduling options they can use when counseling students. (Year 1)

4. Revise, repackage and update Counselor Handbook. (Year 2)

5. Make informational presentations during faculty meetings in mid-high and high schools.
(Ongoing)

6. Provide updates on Tech Prep for superintendents from participating schools when they meet as a group.
(Ongoing)

7. Identify ways to support counselors' and instructors' effforts to increase career awareness and exploration in their schools.
(Ongoing)

8. Visit eighth grade math or science classes to discuss career options and Tech Prep. (Ongoing)

9. Conducted inservice for vocational and applied academic instructors and counselors to increase involvement and cooperation in the Tech Prep process. (Year 2)

10. Conducted cooperative learning workshop with applied academic instructors and administrators. (Year 2)

11. Reinforced vision for Tech Prep among FTVTC employees during staff meetings. (Year 2)

12. Provided Tech Prep overview and classroom participation in vocational and applied academic classes for instructors and counselors participating in Camp Discovery. (Year 2)

13. Exposed counselors to workplace needs via a tour of local high tech industry. (Year 2)

Business/Community

Key Message: Tech Prep is preparing students to become productive workers in the technology-based workplace. Better prepared students become better workers who improve company productivity and economic development in the community.

1. Conduct a minimum of four forums on Tech Prep with area Chambers of Commerce and other civic groups.
(Year 1)

2. Distribute information on Tech Prep during advisory commitee meetings and encourage business and industry to serve as community resources for Tech Prep.
(Ongoing)

3. Utilize area media to inform taxpayers about Tech Prep programs.
(Ongoing)

4. Conducted business and industry focus group to identify key messags and ways to involve industry leaders. (Year 2)

5. Provided resource list of industry speakers for instructors. (Year 2)

6. Established business and industry marketing advisory committee to develop plans for industry involvement. (Year 2)

7. Developed an "At-A-Glance" fact sheet for instructors to use when calling on industry. (Year 2)

8. Plan a kickoff event for enlisting increased industry participation.
(Year 3)

TECH PREP MARKETING STRATEGIES

TECH PREP MARKETING GOAL

To encourage targeted audiences to respond positively and to promote student enrollment in the Tech Prep process

PHASE I - BEGINNING PROGRAMS

PRIMARY OBJECTIVES

- Address educational needs of students
- Encourage enrollment in articulated classes
- Promote a positive image of Tech Prep programs

THE PLAN

- Determine the target audience.
- Design promotional logo.
- Select and design promotional items and/or printed materials.
- Distribute promotional items.
- Develop comprehensive marketing plan.

PHASE II - INTERMEDIATE PROGRAMS

PRIMARY OBJECTIVE

- To provide more information to expanded audiences

THE PLAN

- Establish an internal marketing committee.
- Increase the target audience.
- Determine perceptions of target audiences.
- Establish a key message for each target audiences.
- Revise or create new program brochures, videos, etc.
- Promote a state-wide public relations committee

PHASE III - ADVANCED PROGRAMS

PRIMARY OBJECTIVE

- To revise, update, and add new marketing activities

THE PLAN

- Develop videos and brochures for vocational clusters.
- Provide summer training for vocational and applied academic teachers.
- Promote instructor "on-the-job" training.
- Provide academic enrichment.
- Develop marketing cooperation and networking among consortia on a state-wide basis.
- Promote and participate in state and regional conferences.

THE TECH PREP MARKETING COMMITTEE

- Promote communication and interaction among:
  - Secondary and post-secondary faculty, staff and administrators
    - Bi-monthly applied academic instructor meetings and departmental meetings
    - Committee development (Curriculum, implementation, etc.)
    - Staff development
  - Parents, students and the community
    - Student visits to secondary and post-secondary campuses
    - Business and/or parent visits to vocational technical centers
    - Organization of business focus groups
- Plan the filming of promotional videos
- Inform students/parents/community

MARKETING TECH PREP TO STUDENTS

- Develop and distribute an instrument to survey students as to their vocational perceptions and needs.
- Develop marketing items.
- Administer a career interest assessment.
- Explain the applied academic curriculum to 8th grade students.
- Develop plan to illustrate Tech Prep opportunities and options.
- Plan an individual career counseling session for 9th grade students.
- Plan for Tech Prep student evaluation.

ACTIVITIES

MEDIA

- **Print:** Articles in student newspapers, posters and brochures
- **Non-Print:** Promotional campaigns and gimmicks.

VISITATIONS/DEMONSTRATIONS

- Tour business and industry facilities.
- Use focus groups.
- Provide career counseling.
- Promote facility tours of area vocational school and community college.

PRESENTATIONS

- Explain applied academics to 8th grade students.
- Invite guest speakers.
- Encourage student testimonals.

PROMOTIONAL EVENTS/ACTIVITIES

- Develop school/business partnerships
- Market apprenticeships
- Provide career options at special events.

MARKETING TECH PREP TO EDUCATORS

- Develop Curriculum, Student Services,and Staff Development committees
- Develop counselor/teacher needs and interest survey
- Develop marketing materials
- Plan career awareness education for K through 12th grade
- Plan orientation/focus meeting with consortium teachers, counselors and administrators
- Select a career interest assessment instrument
- Assist counselors with the development of a career cluster plan
- Facilitate staff development for teachers and counselors

ACTIVITIES

MEDIA

- **Print:** Question and Answer handout
  Counselor Handbook
  Newsletter
- **Non-Print:** Notepads, pencils, pens, postcards, coffee cups

VISITATIONS/DEMONSTRATIONS
- Tour of business and industry sites and other Tech Prep facilities
- Summer staff development at business/industry site
- Individual visits with instructors

PRESENTATIONS
- Business and industry panel focus groups
- Tech Prep orientation for administrators/counselors/teachers
- Informal presentations at faculty meetings
- Updates on Tech Prep at superintendents' meetings
- Joel Barker video, "Shifting Paradigms"

PROMOTIONAL EVENTS/ACTIVITIES
- State Tech Prep Conferences
- National Tech Prep Network Conference

MARKETING TECH PREP TO BUSINESS AND INDUSTRY

- Establish a Tech Prep Business and Industry Advisory Committee
- Formulate a needs assessment focus group
- Develop marketing materials based on recommendations of the focus group
- Develop an at-a-glance fact sheet for instructors' use with business and industry
- Plan a business and industry "event"
- Plan for follow-up on responses from business and industry

ACTIVITIES

MEDIA
- Print: Individual business needs assessment
  Business and industry fact sheet
  Newspaper
- Non-print: Radio, TV, and cable advertisement
  News features

VISITATIONS/DEMONSTRATIONS
- Interaction between students and business
- Teacher visits to business and industry sites

PRESENTATIONS
- Informational presentations to internal advisory committees.
- Civic organizations

PROMOTIONAL EVENTS/ACTIVITIES
- **Business/Industry breakfast**
- **Instructor/Advisory Committee meetings**

MARKETING TECH PREP TO PARENTS AND COMMUNITY

- **Develop survey instrument to assess perceptions and concerns of parents**
- **Develop appropriate marketing materials**
- **Formulate parent focus group**
- **Develop plan for business and industry to inform parents**
- **Plan Tech Prep parent orientation meeting**
- **Include parents in student career counseling**
- **Inform civic organizations**

ACTIVITIES

MEDIA
- **Print:** Brochure for parents of 8th and 9th grade students
  Letter inviting parents to career counseling session
  Articles in community and school newspapers
  Advertisement in school sports programs
- **Non-print:** Speaker kit
  Local TV and radio coverage
  News releases and PSA for radio and TV stations
  Cable advertisement

VISITATIONS/DEMONSTRATIONS
- **Career counseling with parents and students**
- **Focus group meetings**

PRESENTATIONS
- **Parent orientation**
- **PTO meetings**
- **Civic organizations**

PROMOTIONAL EVENTS/ACTIVITIES
- **Tech Prep night for parents**
- **Career Day**

EVIDENCES OF MARKETING SUCCESS

- More parents attend and participate in school activities for vocational programs
- More teachers (vocational and academic) and guidance counselors know about and recommend the TP process
- More students enroll in articulated classes and plan a sequence of TP related coursework in their last 2 years of high school
- More businesses provide financial support, mentoring, job shadowing, and internships

WHAT WE HAVE LEARNED

- Effective public relations is building relationships.
- People support what they help create.
- Committee structure is slow, but it is the best way

- Students pay attention to other students.
- Developing a good Tech Prep process is 99% public relations.
- Presentations and printed materials are more effective if they are visual.
- Time spent in planning is time well spent.
- Remember, Rome wasn't built in a day.

TECH PREP PRODUCTS
ORDER FORM
FRANCIS TUTTLE VO-TECH FOUNDATION, INC.

ITEM	QUANTITY & SIZE	COST EACH	TOTAL
Tech Prep T-Shirts (L, XL, XXL)		**$10.00**	
Tech Prep Sweat Shirts (XL, XXL)		**$20.00**	
Tech Prep Posters (1-100)		**$3.00**	
Tech Prep Posters (101 +)		**$2.00**	
Tech Prep Excel Video (FT customized, demo only, 11 min.)		**$50.00**	
Tech Prep logo (camera ready)		**$250.00**	
Counselor Handbook (Limit 2 per consortium)		**NO CHARGE**	
SUBTOTAL			
Shipping & Handling Add 5% to total for Shipping & Handling			
		TOTAL	

Your School Name_____

Address _____

Street

_____

City State Zip

Contact Person_____Phone_____

School PO# _____

Make Purchase Orders and Payment for Tech Prep Materials out to:

FTVT FOUNDATION, Inc.
Francis Tuttle Vo-Tech Center
12777 N. Rockwell
Oklahoma City, OK 73142-2789
FAX: (405) 720-4790 Phone: (405) 720-4119

TECH PREP CAREER VIDEOS

INDUSTRIAL/ENGINEERING TECHNOLOGY RECRUITMENT VIDEO

Audience: students and parents
Length: approximately 11 minutes
This video depicts various careers within the Industrial and Engineering Technology cluster. Opportunities in printing, food processing, architectural technology, aerospace technology, automotive technology, and CADD animation are shown to students. This video is currently available.

HEALTH TECHNOLOGY RECRUITMENT VIDEO

Audience: students and parents
Length: approximately 11 minutes
This video depicts various careers within the Health Technology cluster. Opportunities in the fields of nursing, radiology, physical therapy technician, medical assisting, dental assisting, respiratory therapy, among others are shown to students. This video will be available in the winter of 1993.

BUSINESS AND OFFICE EDUCATION TECHNOLOGY RECRUITMENT VIDEO

Audience: students and parents
Length: approximately 11 minutes
This video depicts various careers within the Business and Office Technology cluster. Opportunities in the fields of banking/financial services, applied accounting, microcomputer applications and office/secretarial are shown to students. This video will be available in the winter of 1993.

All videos listed above are being created with Tech Prep federal demonstration funds. These will be given to each state Tech Prep director and may be copied and distributed as desired. Each video will be professionally produced using advanced technology graphics in a generic format to allow usage by all Tech Prep consortia. Unless otherwise requested, a three-quarters master of the recruitment videos will be sent. If you do not have duplicating capabilities, five VCR copies of each video will be sent.

Statewide Trep Prep Marketing Package

TECH PREP
Boiler remarks for film lead

While headlines today focus on the tremendous downsizing that is occurring among stalwarts of America's economic backbone, there are equally significant, but largely unnoticed, events taking taking place in the intimate everyday world we inhabit -- the world of supermarkets, hospitals, banks and business offices, television, telephones, and computers.

These events are disrupting and supplanting older, more familiar methods and ways of doing things. Perhaps no place has changed more dramatically than the work place. Thirty years ago most Americans worked for large companies. Many were factory workers.

From the moment the bell rang, workers raced to do repetitive jobs, desperately trying to keep pace. Workers were taught a job - not a skill. Work was de-skilled, standardized, broken into the simplest operations.

Workers were kept in the dark. They were told nothing about new products or new machines. People wearing white shirts solved the problems and knew everything about the factory, goals, procedures, and plans.

Today's work place is vastly different from what it was thirty years ago, or even seven years ago. Driven by sweeping technological advances, the work place continues to constantly evolve. Since vocational and technical education trains America's work force, it is imperative that our state's vocational and technical education system stay on top of the changes that are taking place.

The traditional American way of assuring quality -- namely, that management checks the output of workers who follow engineers' minutely detailed instructions -- is a thing of the past. By allowing workers more discretion -- no longer preprogramming their every move -- companies like Ford Motor company can approach the goal of zero defects.

Instead of one repetitive task, workers today are told many times even before they are hired that they will need to handle several different jobs. They will be expected to come up with fresh ideas for improving production, and in that regard, they must be prepared to give, as well as take, constructive criticism. We are witnessing replacement of muscle power by mind power in virtually every facet of the work place.

Today's worker is expected to learn more about adjacent and successive jobs. A General Motors ad proudly speaks of workers' helping to choose the lighting in their plants, selecting the sandpaper, the tools and even learning how the plant runs, what things cost, how customers respond to their work.

Futurist Alvin Toffler says that the knowledge load and the decision load are being redistributed. In a continual cycle of learning, unlearning and relearning, workers need to master new techniques, adapt to new organizational forms and come up with new ideas.

Conquering a skill; being able to adjust, quickly; being able to do many things versus just one thing; being able to communicate, analyze and problem solve; these are the traits America's business looks for in the people it is hiring today.

Although a college education is important, it is not essential to landing a good job in today's work place. The United States Congressional Office of Technology Assessment predicts that seventy percent of the jobs that will be created the remainder of this decade will not require a college degree. But they will require some degree of technical preparation and the mastering of communication, analytical and problem solving techniques.

Tech Prep does just that for today's high school students. It is a pathway that provides a diversified learning experience and actually prepares students for the real world. Classroom theories are applied in laboratory settings.

Tech Prep gives students options they otherwise would not have if they follow a more traditional education path. Students who choose college will discover that Tech Prep gives them a head start. Students who choose a career will discover that Tech Prep gives them a competitive edge.

The following ten-minute video presentation explains Tech Prep. The information that will be presented could very likely cause you to rethink your personal positions about how young people today should be educated and trained.

(Roll Video)

Letter to General Managers:

____(name of Vo-Tech)_____ is involved in a statewide push to help make parents of junior high and high school students aware of Tech Prep, a cooperative education program between high schools, community colleges and vocational-technical schools.

For your information, Tech Prep is different. It is not traditional. The education experience is based on the practical application of the subject matter, not on theory. Students take academic subjects at their high school. Then they go to their local vocational technical school and see what they learned in the classroom applied in a real world setting.

A public service announcement has been produced. We ask that you consider running it periodically during the next two months. Students are currently pre-enrolling for next year. Your running the public service announcement would help us alert parents and, hopefully, stimulate much needed interest in Tech Prep.

Should you have any questions, please call me at _____.

Sincerely,

Xxxxxx Xxxxxx
Xxxxxxxxxxxxx

Enclosures

NEWS RELEASE
March 25, 1993

ENROLLMENT STARTS FOR TECH PREP...
MORE OKLAHOMA JUNIOR AND SENIOR HIGH STUDENTS
INTRODUCED TO THE NEW PROGRAM

Oklahoma City, OK -- A concentrated two-month effort to improve awareness and understanding among Oklahoma junior and senior high students and their parents or guardians about a relatively new educational initiative called Tech Prep began this month.

Representatives from Oklahoma City Community College, the University of Oklahoma, Francis Tuttle Vo-Tech Center, Putnam City, Deer Creek, Edmond and Western Heights schools will discuss Tech Prep with junior and senior high school students during visits to local schools this month and next. Also taking part in visits will be representatives from Oklahoma State University Technical Branch in Oklahoma City, Metro Tech, and Oklahoma City, Millwood and Crooked Oak school districts.

Tech Prep will help students transition more easily into college or the work place. The outcome-based curriculum emphasizes strong academic, technical and critical thinking skills. Through a planned course of study, students become competent in mathematics, science and communications.

Students plan their studies to concentrate on a specific field of learning such as engineering technology, applied science, industrial maintenance technology, practical arts, agriculture, health or business.

--more--

During their junior and senior years of high school, students take applied courses like chemistry and physics in their field of interest along with traditional academic courses such as English and History at their high school. They progress from the "hands on" application courses at their high school to technical career classes at their local state vocational-technical school. Then students can continue their education at the area community college or enter the work force.

Metro Tech's Ken Groth and Francis Tuttle's Carla High said, "Schools must prepare students for the realities they will face when entering the work force. It is critical that students master a particular technical subject and be able to analyze information and communicate effectively. For many students Tech Prep isn't just an option it's an opportunity."

Tech Prep is available in most high schools. Parents and students who are interested in the program should see their high school guidance counselor for more details.

# # #

Contact:
Francis Tuttle Vo-Tech
Carla High 405-722-7799

Metro Tech
Ken Groth 405-424-8324

BROADCAST SCRIPT

Client: State Vo-Tech
Project: Commercial
Job Code: FTV1593
Medium: Television
Length: 30 seconds
Writer: B. Gooden
Contact: J. Powell/S. Brooks
Producer: B. Gooden
Director: TBD

Final Approval 1/29/83

Audio	Video
Customized music under	
FOR MANY OKLAHOMA HIGH SCHOOL STUDENTS THEIR FUTURES LOOK LIKE THIS... BLANK; BUT CERTAINLY NOT BLEAK.	Screen opens with a totally white background.
BECAUSE NOW THERE IS TECH PREP	Using computer graphics, the words TECH PREP cleverly appear on the screen in bright colors. Behind the words TECH PREP, lines appear in certain patterns to project an aura of hi-tech sophistication.
A GREAT EXPERIENCE THAT GIVES STUDENTS WHAT THEY WILL NEED TO EXCEL IN COLLEGE AND IN LIFE.	Lines begin to converge... the words Tech Prep stay on the screen. The word EXCEL appears quickly on the screen. When the FUTURE. announcer starts the line that says THE PATHWAY lines should form a pathway woven through the letters of TECH PREP.
TECH PREP. LOOK INTO IT FOR YOUR CHILD.	
THE PATHWAY TO A PROMISING FUTURE. THAT'S TECH PREP	
Music ends	
CONTACT YOUR LOCAL HIGH SCHOOL, AREA VOCATIONAL TECNICAL SCHOOL OR COMMUNITY COLLEGE FOR DETAILS.	Super: A Public Service Announcement

VIDEO SCRIPT

Client:	Vocational and Technical Consortium
Project:	Video Script
Job Code #:	FTV1593
Title:	MY CHILD'S FUTURE
Length:	7 minutes
Date:	October 1993
Writer:	B. Gooden
Contact:	J. Powell
Status:	Edited Final Draft
Action:	Review

Audio	Video
BUSINESS IN AMERICA HAS MANAGED TO CHANGE. HOW WELL BUSINESS HAS MANAGED THE CHANGE DETERMINES IF IT'S STILL A VIABLE ENTERPRISE TODAY.	Screen Black Slow dissolve: **BUSINESS**
SX: Sound of an explosion	
(Pause) Background voice echoes the word "change" repeatedly. As the voice fades the word "change" fades also.	Special Effect: The word "Business" disintegrates and forms the word **CHANGE**
(Pause) 1920's music starts	Historical photo from the industrial revolution age dissolves on screen.
THROUGH THE YEARS, BUSINESS HAS MANAGED TO INDUSTRIALIZE. (Pause)	Dissolve the word "Industrialize" over the picture
1960's music starts	

TO MODERNIZE:

Historical photo from the 1960's showing an advance manufacturing development from that era.

Dissolve the word "Modernize" over the picture.

(Pause)

1980's music starts

TO COMPUTERIZE:

Historical photo showing the application of computers in the work place.

Dissolve the word "Computerize" over the picture.

(Pause)

1990's music starts

Photo of the Earth suspended in space.

TO GLOBALIZE:

Dissolve the word "Globalize" over the picture.

(Pause)

Dissolve to black.

Music down.

AND NOW BUSINESS IS MANAGING TO REORGANIZE.

Dissolve up the word "Reorganize".

Sounds of a newscast using different voices for each headline.

HEADLINE NEWS TODAY.

Dreary music, high emotional mystery music track as a bed.

New voice: IBM SAYS IT WILL TERMINATE 20,000 JOBS THIS YEAR.
New voice: UNITED TECHNOLOGY IS LAYING OFF INDEFINITELY FIVE THOUSAND PEOPLE IN CONNECTICUT.

Slow pulls and pans over photos of of people who have been laid off or or their jobs terminated.

New voice: GM ANNOUNCED TODAY IT WILL CLOSE SEVERAL OF ITS UNITED STATES PLANTS THIS DECADE AFFECTING OVER FIFTY THOUSAND WORKERS. (Fade voices)	Photos of auto workers. (Screen fades to black)
Anncr. Voice: NOTHING IS CHANGING FASTER THAN THE WORLD OF BUSINESS. WHAT IS IN TODAY, MAY BE OUT TOMORROW. WHAT IS A THRIVING BUSINESS TODAY, MAY BE A DYING ONE TOMORROW. WHAT IS A JOB THAT IS IN DEMAND TODAY MAY BE GONE TOMORROW.	Slowly dissolve on the screen a letter at a time the word "F U T U R E" FUTURE is full screen.
WHAT WILL YOUR CHILD BE DOING IN THE YEAR 2010?	Write question on screen
WHAT SKILLS WILL BE NECESSARY?	Write question on screen
WHAT CAN YOU DO TODAY THAT WILL IMPROVE YOUR CHILD'S CHANCES TO SUCCEED?	Little kid playing dressing up for work - 7 years old (Allan) kids playing in the park
Music up, tempo faster and tone cheery. Presentation now to provide a possible answer to the quandary posed by the question.	(Allan) Slo-mo of kids in line
Anncr. voice: HE'S NOT JUST YOUR CHILD. (pause) SHE'S NOT JUST YOUR CHILD. (pause) HE'S NOT JUST A STUDENT. (pause) SHE'S NOT JUST A STUDENT. IN THIS CLASSROOM, THEY ARE WHAT A BUSINESS AND INDUSTRY NEEDS TO SECURE ITS FUTURE IN A CHANGING WORLD. THEY ARE THE NEXT	Still photo of a boy and girl in an empty classroom. Photo should be black and white. Camera slowly pans and pulls vertical, starting at the feet and stopping when their full bodies are revealed and the surrounding can be easily identified as a classroom.

GENERATION. AND THEY ARE ACQUIRING THE KNOWLEDGE AND THE SKILLS TO SUCCEED IN THE TWENTY-FIRST CENTURY.

HOW? IT IS THROUGH A PROGRAM CALLED TECH PREP. IT'S PROVIDING OKLAHOMA HIGH SCHOOL STUDENTS A MEMORABLE AND MEANINGFUL LEARNING PATHWAY, MAKING IT EASIER FOR THEM TO EITHER TRANSITION INTO COLLEGE OR MOVE DIRECTLY INTO THE WORKFORCE.

Video: Show the same two students, diligently working in a stimulating traditional classroom setting. Series of cuts during this sequence. Shots should be carefully blocked to visually evoke the emotions conveyed in the audio. Shots should be blocked. During this 30-second section, estimate six cut edits.

On the last shot of the above sequence, which should be a medium shot where the two subjects are seen in the foreground and the blackboard is seen in the background with the words TECH PREP written on it, the camera zooms slowly past the subjects, focusing on the words on the blackboard.

THE ENVIRONMENT WHERE YOUR CHILD WILL WORK WILL BE MUCH DIFFERENT THAN THE ONE WHERE YOU WORK.

Talent on camera at AT&T plant in OKC. Background are production workers assembling the advanced telephone switching systems.

IT WILL BE A COLLABORATIVE EXPERIENCE WHERE INFORMATION IS SHARED BETWEEN COMPUTERS AND PEOPLE. LEARNING WILL BE CONSTANT. AND HIGHLY DEVELOPED SOCIAL AND COMMUNICATION SKILLS WILL BE ESSENTIAL.

Cut edit to workers discussing a project. Several cut editors in the scene in order to match timing of the audio sequence.

TECH PREP IS AN INDUSTRY AND EDUCATION PARTNERSHIP COMMITTED TO PROVIDING BUSINESS WITH A TRAINED AND MOTIVATED WORK FORCE PREPARED AND ABLE FOR LIFELONG LEARNING IN CHANGING TECHNOLOGICAL SOCIETY.

Cut back to talent on screen. Background of scene is the team group discussing the project. Talent walks into scene and stops.

IN OTHER WORDS, TECH PREP IS THE EDUCATION OPTION THAT PREPARES YOUNG PEOPLE FOR THE REALITIES OF THE FUTURE THEY WILL FACE.	Cut edit new shot of talent; medium close-up. Camera moves right, providing enough space for a graphic build-up of the following words, which are to be revealed when the talent says them.
TECH PREP EMPHASIZES STRONG ACADEMIC, TECHNICAL, ANALYTICAL, COMMUNICATION, AND SOCIAL SKILLS.	**academic** **technical** **analytical** **communication** **social**
AND WITH THESE SKILLS, TECH PREP STUDENTS CAN TARGET SPECIFIC FIELDS OF STUDY.	
LIKE ENGINEERING,	Cut to student studying engineering technology . . . kryon bottom.
SCIENCE,	Cut to student studying applied science . . . kryon bottom. Cut to student studying mechanical, industrial or practical trade . . . kryon bottom.
AGRICULTURE,	Cut to student studying agriculture . . . kryon at bottom.
HEALTH, AND	Cut to student studying health . . . kryon at bottom.
BUSINESS.	Cut to student studying business . . . kryon at bottom.
TECH PREP HELPS STUDENTS PLAN CAREERS, SMOOTHLY TRANSITION IN COLLEGE, OR GAIN A MUCH NEEDED COMPETITIVE EDGE TO LAND A PRODUCTIVE AND PROSPEROUS JOB.	Cut back to talent in a vocational-technical learning setting.

IN SHORT, TECH PREP CAN GIVE YOUR CHILD VIRTUALLY UNLIMITED OPPORTUNITY. HERE IS HOW IT WORKS.

Cut to close up of talent's face.

Talent exits camera left from scene. Talent enters camera right into a new scene. The new scene shows the talent sitting at a computer. Showing on the computer's screen is the equation 2 + 2. Camera begins a slow zoom into the equation.

THE MATHEMATICAL EQUATION TWO PLUS TWO IS A SIMPLE WAY TO DESCRIBE TECH PREP. IT LINKS THE LAST TWO YEARS OF HIGH SCHOOL WITH THE FIRST TWO YEARS OF POSTSECONDARY STUDIES.

Cut to a medium shot of talent. Talent turns from looking at the computer screen to looking directly into the lens of the camera.

SIMPLE. TWO PLUS TWO. THE POST-SECONDARY STUDIES CAN BE AT AN AREA VO-TECH SCHOOL, COMMUNITY COLLEGE, OR A FOUR-YEAR COMPREHENSIVE UNIVERSITY.

Cut to scene of a student (Jo) viewing a sophisticated model of the space shuttle.

TAKE FOR EXAMPLE JO. SHE DREAMS OF BEING THE FIRST PERSON TO WALK ON MARS. HER INTEREST IS IN AVIATION AND AEROSPACE TECHNOLOGY.

Cut back to talent in a vo-tech setting where aviation maintenance is taught.

A JUNIOR, JO HAS ENROLLED IN AN AVIATION MAINTENANCE CLASS AT HER LOCAL VO-TECH. HERE SHE GETS IMPORTANT HANDS-ON, PRACTICAL EXPERIENCE. IT IS NOT JUST THEORY HERE. IT IS THE REAL THING.

Dissolve to scene of Jo at her high school in a physics class.

BACK AT HER HOME HIGH SCHOOL, JO IS COMPLEMENTING HER LEARNING EXPERIENCE, STUDYING APPLIED CHEMISTRY, PHYSICS AND MATH. HE ALSO STUDIES TRADITIONAL ACADEMIC COURSES SUCH AS ENGLISH AND HISTORY.

Cut to talent in the classroom. We see Jo in the background.

JO IS A TYPICAL TECH PREP STUDENT. HER PARENTS, HER TEACHERS, HER COUNSELORS, AND JO HAVE ALL WORKED TOGETHER TO DECIDE WHICH COURSES SHE SHOULD TAKE. THEY ARE LIKE INDIVIDUAL PIECES OF A JIGSAW PUZZLE, AND ONCE PUT TOGETHER, MAKE A BEAUTIFUL PICTURE, GIVING HER A HEAD START ON HER HIGH TECH CAREER.

Dissolve to walking briskly outside her school.

WHATEVER JO DECIDES TO DO AFTER GRADUATION FROM HIGH SCHOOL, ONE THING IS FOR CERTAIN--SHE WILL HAVE MADE TREMENDOUS ADVANCES TOWARD A GREAT FUTURE THANKS TO TECH PREP.
(pause)

Begin computer graphic of Tech Prep that was used in the PSA commercial.

TECH PREP

A LEARNING EXPERIENCE, EMPHASIZING APPLIED APPROACHES WITH PRACTICAL APPLICATIONS.

TECH PREP

THE PATHWAY TO A PROMISING FUTURE.

Cut to talent, close-up of face.

THE SMART DECISION FOR YOUR CHILD'S FUTURE.

IMPLEMENTATION

Following is a brief overview of actions that will assist in the creation of a successful Tech Prep process (9):

STEPS IN THE PROCESS

1. Assemble the committees to guide and oversee the project. CREATE's committees and their responsibilities appear at the end of this section.

2. Meet with participating administrators, counselors, and department heads to explain the Tech Prep process, its mission and goals.

3. Formulate a teacher selection process and initiate training for prospective applied academic instructors.

4. Create the team to formulate the articulation agreements between participating secondary and postsecondary institutions.

5. Develop focus groups from the business community to assess the technologies and skills needed for employment in the region.

6. Create teams of educators to devise the core curriculum of math, science and communication.

7. Send draft copies of curricula to at least three representatives of business/industry and to postsecondary institutions with whom the project is working.

8. Order text books and equipment needed for all classes well in advance of the start of school.

9. Recruit students for Tech Prep through appropriate 8th grade math, English, or science classes, career interest assessments, and counselor advice.

10. Maintain internal and external communication with other educators, especially counselors and department chairpersons, and with supporting business and industry.

11. Hold Tech Prep teacher meetings at scheduled intervals and provide internship opportunities.

12. Monitor and evaluate the course content at the end of each school year. Make revisions as deemed appropriate to meet stated goals.

13. Provide business internship opportunities for teachers involved in Tech Prep classes.

14. Follow up on Tech Prep students regarding employment, further training and achievement.

15. Communicate the Tech Prep story to internal and external audiences.

COMMITTEE INVOLVEMENT

A notebook is kept that chronicles the activities of each Tech Prep committee. This includes names of members, meeting agendas and minutes, correspondence, and any item produced by the committee. The duties and responsibilities of the committees that implement CREATE's Tech Prep process are as follows:

Leadership
Meets twice a year to make decisions regarding implementation

Steering
Acts as the decision-making body

Public Relations
Coordinates promotion and marketing of the Tech Prep process

Curriculum
Makes decisions regarding curriculum revision and articulated and cooperative course alignment by vocational program and college area

Staff Development
Plans and implements in-service staff activities and training

Evaluation
Evaluates overall program and identifies the proper instruments to collect and analyze data

Student Services
Develops the career education program, identifies career assessment instruments and directs student placement and recruitment

Business and Industry
Provides input on curriculum and assists in the development of educator/business experiences, internships and partnerships for student career development

CREATE'S IMPLEMENTATION OF TECH PREP

TECH PREP COMPONENTS	PARTICIPATING INSTITUTIONS					
	Putnam City	Western Heights	Edmond	Deer Creek	Francis Tuttle Vo-Tech Center	OK City Community College
Tech Prep Algebra I Curriculum	X	X	X	X		
Tech Prep Geometry Curriculum	X	X	X	X		
Principles of Technology I Curriculum	X	X	X	X		
Principles of Technology II Curriculum		X				
Tech Prep Biology/Chemistry I Curriculum	X	X	X	X		
Tech Prep Biology/Chemistry II Curriculum	X	X				
Applied Communication Curriculum	X	X				
Eighth-Grade Career Assessment	X	X	X	X	X	X
Six-Year Plans of Study Developed by Counselors	X	X	X	X		
Development of Business & Industry Partnerships	X	X	X	X	X	X
Eighth-Grade Visits by District Personnel	X	X	X	X	X	
Committee Participation by District Personnel	X	X	X	X	X	X
Tech Prep K-8 Career Awareness Plan	X	X	X	X		
Release Time for District Personnel to Attend Staff Development	X	X	X	X	X	X
Articulation of Secondary to Post-secondary Courses					X	X
Integration of Academic Courses				X		

PROGRAM EVALUATION

THE OVERVIEW

The following documents represent the components of CREATE's evaluation plan. The first plan was designed to evaluate the three-year project which began July of 1991. Objectives, time lines and evaluation methods are described, as well as achieved progress.

The second plan, "CREATE-Tech Prep Evaluation Approach and Design", was created to meet the Tech Prep Federal Demonstration Grant which was awarded January of 1993. This document establishes the tools and methods which will provide for effective and comprehensive evaluation of our process as it evolves.

Other means are used to evaluate teacher/counselor attitudes and perceptions, inservice activities, presentations to groups, marketing products, and effectiveness of committees. Forms and surveys that evaluate each of these components appear at the end of this section.

CREATE'S TECH PREP REPORT
June 28, 1993

The following document is CREATE's Evaluation Plan. We have decided to use it to determine if our goals have been met on the Tech Prep project. Comments are in italic type. When necessary, dates are being changed to meet the desired outcome. Committee notebooks have been prepared to document the activities for each year.

There is one column on the left side of the CREATE's Evaluation Plan titled "Goals Met". If the item has been met, there will be a "Y" for Yes or "N" for No. The items which are in progress are noted also.

CREATE's Evaluation Plan

The ten objectives for this three-year project primarily are related to development and implementation of various aspects of the TPEP program. Two objectives relate to learner outcomes of the applied academic courses and two others deal with enrollment. Most of the ten objectives have major activities associated with them that span the three-year project period. Some of these will be detailed in the summative section below, along with their associated evaluation methods.

Goals Met

Formative Phase

The activities specific to the formative phase of the evaluation include:

Y • the evaluator will meet with the various committees periodically to review their progress and interview committee members regarding their view of the committee's operation, solicit suggestions to improve operation, and explore any barriers to progress that have arisen;

Y • instructors and counselors will be interviewed or surveyed to solicit their opinions on the effectiveness of the training that they received during the project and any modifications they might suggest;

Y • students in the applied academics courses will be interviewed or surveyed regarding their perceptions of their competency following the courses, any suggestions they have for improving the courses, and their ideas for recruitment and retention of students;

In Progress • a variety of historical (1985-1991) and baseline data (1991-1994) will be collected for use in later comparisons (perhaps subsequent to the project). Historical data of interest would include vo-tech enrollment figures (broken down by race and gender), enrollment in OKCCC A.S. programs, enrollment of

A.S. recipients at OU, placement rates at each exit point, drop-out figures at each stage, and achievement test data. The same data would be collected during this project as a baseline for comparison to historical data and to subsequent project data collected after the three-year period.

Summative phase

Objective 1: Establish competency-based articulated Tech-Prep education curricula for occupations in engineering/trade technology, health, and business education which lead to an associate degree, two-year certificate, or a baccalaureate degree by June 30, 1994.

Goals Met	Year	Major Activity and Proposed Date of Completion	Evaluation Method
Y	1	Various committee formation by 7/10/91 *later date*	Verify with project documentation
Y	2	Articulation agreement for engineering/trade technology cluster by 8/1/91. *Cooperative for adults in place; articulation for high schools for Drafting and Welding; Business Education*	Verify with project documentation
Y	1	Involve faculty in developing engineering/trade curricula (half-day workshop and then small group work) *As needed*	Verify with project documentation and school in-service records
Y	1	Engineering/trade technology transfer between post-secondary and secondary schools by 1/1/92. *In progress; on-going*	Verify with project documentation and school in-service records
Y	1	Engineering/trade curricula ready by 7/1/92	Verify with project documentation
In Progress	2	(All the same major activities, but for business education occupational cluster. Curricula to be ready by 7/1/93.)	Verify with project documentation and school records
	3	(All the same major activities, but for health occupational cluster. Curricula to be ready by 6/30/94.)	Verify with project documentation and school records
Y	2	Articulation in specified courses relating to TPEP will be established at OU and OKCCC by 7/30/94. *In Engineering, added UCO. See brochure in Tab 10 - other.*	Verify with project documentation and school records

Objective 2: Establish local teacher certification systems in applied physics, applied chemistry/biology and applied mathematics by June 30, 1994.

Goals Met	Year	Major Activity and Proposed Date of Completion	Evaluation Method
Y	1	Train 10 AM1 teachers and 2 PT1 teachers by 8/28/91. *Actually 14 AM1 teachers and 1 PT1 (2 days) Change Summer '92: 8AM1, 5PT1, 1ABC1*	Verify by project documentation and school in-service records
Y	1	Develop training plan for teachers and counselors by 9/15/91. *Revised to 9/92*	Verify by project documentation
Y	1	Develop local teacher certification system for applied mathematics by 5/1/92. *Change to 5/93*	Verify by project documentation
Y	2	Train 16 AM1, 10 AM2, 12 PT1, 1 PT2, and 13 ABC teachers by 8/28/92. *Summer '93: 2PT1, 1PT2, 8ABC1, 1ABC2, 6AM1, 6AM2, 4COMM*	Verify by project documentation and school in-service records
Y	2	Hold in-service for the staffs of CREATE by 12/31/92. *Bimonthly instructor meeting, two-day summer.*	Verify by project documentation and school in-service records
In Progress	2	Develop certification system for PT1 and PT2 by 5/31/93	Verify by project documentation
Y	2	AM1 and AM2 teachers will complete certification by 5/31/93.	Verify by project documentation
	3	Train 2 AM1, 2 AM2, 3 PT1, 4 PT2 and 4 ABC teachers by 8/28/93.	Verify by project documentation and school in-service records
	3	7 PT teachers will complete certification by 5/31/94.	Verify by project documentation
	3	Develop certification system for ABC 5/30/94	Verify by project documentation

Objective 3: Develop a transportable model training program for counselors by June 30, 1992.

Goals Met	Year	Major Activity and Proposed Date of Completion	Evaluation Method
Y	1	Design and develop model training program for counselors by 6/30/92	Verify by project documentation
In Progress	2	Field test and modify counselor training program by 5/31/93. *Change date 6/30/93*	Verify by project documentation
	3	Implement counselor training program and offer to other TPEPs by 5/31/94.	Verify by project documentation and school in-service records

Objective 4: Integrate 48 sections of applied physics, 68 sections of applied mathematics and 25 sections of applied biology/chemistry into district high schools'/mid-highs' curricula by the dates outlined in each district's three-year implementation plan. *(These appear to be too high 6/92)*

Goals Met	Year	Major Activity and Proposed Date of Completion	Evaluation Method
Y	1	CREATE schools offer 21 sections of AM1 and 6 sections of PT1 in the 1991-92 school year. *AM1 - 29 Sections and no PT1*	Verify by course scheduling data at each school
Y	2	42 additional sections of AM1, 22 sections of AM2, 17 sections of PT1, and 25 sections of ABC will be offered in the 1992-93 school year. *Change AM1-24 sections, AM2-14 sections, PT1-14 sections, ABC-2 sections, Applied Com-1 section*	Verify by course scheduling data at each school
	3	32 AM1, 36 AM2, 34 PT1, 14 PT2, and 25 ABC sections will open in the 1993-92 school year	Verify by course scheduling data at each school

Objective 5: Integrate components of applied communications into the secondary vocational curricula by August 15, 1993.

Goals Met	Year	Major Activity and Proposed Date of Completion	Evaluation Method
In Progress	1	Identify components of applied communication by 5/31/92. *Implemented for 92-93; date change to 5/31/93. Pilot at Western Heights integrating into English curriculum*	Verify by project documentation
	2	Integrate components of applied communication into secondary vocational curricula by 8/15/93	Verify by project documentation

N Objective 6: Evaluate the impact of applied academics on students' critical thinking ability on a yearly basis.

A pretest-posttest design with a matched control group will be employed to evaluate this objective. Matching will be based on grade, gender, GPA, and achievement test scores. The Higher Order Thinking Skills scale of the Tests of Achievement and Proficiency will be the evaluation measure for objective 6. This scale is made up of items (pulled from the standard academic subject scales on the TAP) that are purported to measure critical thinking ability. Administration of the TAP is mandated by the state for grades 9 and 11, but is also given to grade 10 in each of the districts in the consortium.

TPEP students will be matched with non-TPEP control students at the beginning of their 9th grade year. Yearly comparisons of critical thinking skills will be made between TPEP students and their controls through 11th grade.
Possibility: Further looking at TAPS test, using one district as experimental with Cornell Critical Thinking test.

In Progress Objective 7: Document the academic gains of all students enrolled in applied mathematics, applied biology/chemistry and/or applied physics at the end of each course.

Again, a pretest-posttest design with a matched control group will be employed to evaluate this objective. The same matching control group will be used for this objective as used for the evaluation of Objective 6.

1st Year: Used TABE test for pre- and post-test. 2nd Year: Used Iowa Algebra test for Applied Math 1, 1992-93, teacher prepared Principles of Technology and Applied Biology and Chemistry tests through OSU study. Gathering Iowa TAPS information for all Applied Academic students. 3rd Year: Using Iowa TAPS only. See Evaluation Section.

Objective 8: Recruit and enroll 1,117 ninth grade students into the TPEP by August 15, 1994.

and

Objective 10: Enroll 35% of the 10th grade TPEP students into vocational training programs in their 11th grade year. *(Changed from 75%)*

Goals Met	Year	Major Activity and Proposed Date of Completion	Evaluation Method
Y	1	Develop a marketing plan by 9/1/91. *Completed 11/91. Revised 11/92*	Verify by project documentation
Y	1	Develop 1500 copies of promotional video by 12/1/91. *Used video in 8th grade classes, distributed to districts, sold nationally.*	Verify by project documentation
Y	1	Develop Counselors' TPEP Handbook by 1/1/92. *Completed 3/92*	Verify by project documentation
Y	1	Develop system for identifying at-risk students in 7th/8th grades by 5/31/92. *Form created, in-service in June, in-serviced counselors 6/25/92.*	Verify by project documentation
In Progress	1	Review recruitment and promotional materials to ensure encouragement of females and minorities in TPEP. *Developed form on-going*	Verify by project documentation
In Progress	1,2	Evaluate K-12 career awareness activities and develop awareness/activity plan by 7/1/92. *In progress, plan 12/92 each district has own plan, model in Counselor's Handbook.*	Verify by project documentation
Y	1	Conduct a series of four community forums on TPEP by 7/1/92. *Change 7/1/93 Educators have visited with Rotary, Kiwanians, school groups and parents, etc.*	Verify by project documentation
Y	2	Conduct in-service on use of TPEP Counselor Handbook for all counselors by 4/1/92. *Sent to 7/1/92, in-serviced 6/23/92.*	Verify by project documentation
In Progress	2,3	Implement K-8 awareness plan by 6/92 *Change to 6/93 in some sending districts--. Edmond.*	Verify by project documentation and school records
In Progress	2	Implement public relations plan by 7/92 *In progress, constantly changing.*	Verify by project documentation
In Progress	2	Collect data on number of female and minority students in applied academic courses – target for recruitment and retention.	Obtain data from school enrollment records

	2	Develop TPEP intervention plan to target students at-risk for dropout	Verify by project documentation
Y	2	Update Counselor TPEP handbook by 1/1/93 *Revised disseminated draft 6/93.*	Verify by project documentation
In Progress	2	Establish TPEP mentoring program by 7/1/93 documentation. *Edmond working with Liberty Bank.*	Verify by project
	2	Work with local industry to build scholarship fund. *Sold videos, established scholarship through sales.*	Verify by project documentation
	3	Evaluate counseling and recruitment efforts and modify by 11/1/93	Collect comparison figures from school enrollment data. Verify modifications by project documentation
	3	Update Counselor TPEP handbook by 1/1/94	Verify by project documentation
	3	Evaluate and modify preparatory services by 7/1/94	Collect and contrast yearly enrollment figures for TPEP students, broken down by race and gender. Compare projected enrollments with actual enrollments. Verify modifications by project documentation.

Objective 9: Automate the articulation process and the tracking of student competency attainment by June 30, 1994.

Goals Met	Year	Major Activity and Proposed Date of Completion	Evaluation Method
Y	1,2,3	Identify or develop software to automate the articulation process. *Located and have purchased ABACUS. Cannot find time for existing staff to implement; will keep trying.*	Verify by project documentation
In Progress	1,2,3	Identify or develop software for counselors to use in guidance and tracking of TPEP students. *Used ODVTE Career Search scored at FTVTC.*	Verify by project documentation
	3	Have one computer system in place in each public school, and automated program implemented by 7/1/94. *Each applied academics classroom has at least one IBM PC. Math classes have Math Skills software.*	Verify by on-site visits and project documentation

CREATE-TECH PREP EVALUATION APPROACH AND DESIGN

Conducted by

Office of Research and Planning
Oklahoma City Community College
Oklahoma City, Oklahoma

May 5, 1993

Questions??
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I. Evaluation Objectives and Performance Measures

Evaluation Objectives:

Objective 1: Evaluation of the Program Development and Implementation

Objective 2: Evaluation of the Tech Prep Students' Academic Achievement in Knowledge and Skills

Objective 1: Performance Measures

A) Program Development and Implementation

1. Articulation agreement between consortium members
2. Applied curricula development and implementation
3. Students' recruitment records
4. Racial distribution of Tech-Prep enrolled students
5. Tracking Tech Prep students' enrollment, demographic information, GPA and attendance from 9th grade to Vo-Tech at all sites
6. Overall changes in the number of students attending Vo-Tech on yearly basis
   - 1st year total enrollment rates = Vo-Tech + Tech Prep
   - 2nd year total enrollment rates = Vo-Tech + Tech Prep
7. Teachers' attitudes or perceptions
8. Counselors' attitudes or perceptions
9. Students' attitudes or perceptions
10. Attitudes or perceptions of Tech Prep committee members
11. Parents' attitudes or perceptions of Tech Prep students

Objective 2: Performance Measures

A) Tech Prep Students' Academic Achievement in Knowledge and Skills

1. Iowa Test
2. Total GPA in all courses
3. GPA in math and science
4. Enrollment rate of math

B) Tech Prep Students' Attendance / Dropout Rates

C) Critical Thinking Ability

II. Evaluation Approach for Tech-Prep Program Development and Implementation

Objective 1: Evaluation of the Program Development and Implementation

Performance Measures

A) Program Development and Implementation

1. Articulation agreement between consortium members
2. Applied curricula development & implementation
3. Students' recruitment records
4. Racial distribution of Tech-Prep enrolled students
5. Tracking Tech Prep students' enrollment, demographic information, GPA and attendance from 9th grade to Vo-Tech at all sites
6. Overall changes in the number of students attending Vo-Tech on yearly basis
   - 1st year total enrollment rates=Vo-Tech+Tech Prep
   - 2nd year total enrollment rates=Vo-Tech+Tech Prep
7. Teacher's attitudes or perceptions
8. Counselors' attitudes or perceptions
9. Students' attitudes or perceptions
10. Committee members' attitudes or perceptions
11. Parents' attitudes or perceptions

Evaluation Design

- Verify by project documentation and school in-service records (measure 1-3)
- Mail-out CREATE'S Tech Prep student tracking form to each site to collect information on student enrollment, demographic information, GPA & attendance (measure 4-5)
- Contact FTVTC to collect information on the enrollment rates of both Vo-Tech & Tech Prep students in 1993-1994 (measure 6)
- Mail-out or telephone survey for Tech-Prep Teachers at all sites (measure 7)
- Mail-out or telephone survey for Tech-Prep Counselors at all sites (measure 8)
- Mail-out or telephone survey for Tech-Prep Students at all sites (measure 9)
- Mail-out or telephone survey for committee members (measure 10)
- Mail-out or telephone survey for Tech-Prep students' parents (measure 11)

Sample Selection

All sites implemented by CREATE - Tech Prep program will participate in the study.

These sites are:

1) Deer Creek
2) Western Heights
3) Putnam City West
4) Putnam City North
5) Putnam City High
6) Putnam City Western Oaks
7) Putnam City Central
8) Putnam City Mayfield
9) Putman City Alternative School
10) Edmond North Mid-High
11) Edmond Central Mid-High

Instruments Used

- Activity Tracking System (see attachment #1)
- CREATE'S Tech Prep student tracking form (see attachment #2)
- Develop a self-administered instrument of Teachers satisfaction skills
- Develop a self-administered instrument of Counselors satisfaction skills
- Develop a self-administered instrument of Students satisfaction skills
- Develop an instrument for committee members survey
- Develop an instrument for Parents survey

Data Collection Procedures

The documentation of articulation agreement, applied curricula development / implementation, students recruitment and students enrollment records will be compiled by FTVTC and verified by Tech Prep evaluator at OKCCC.

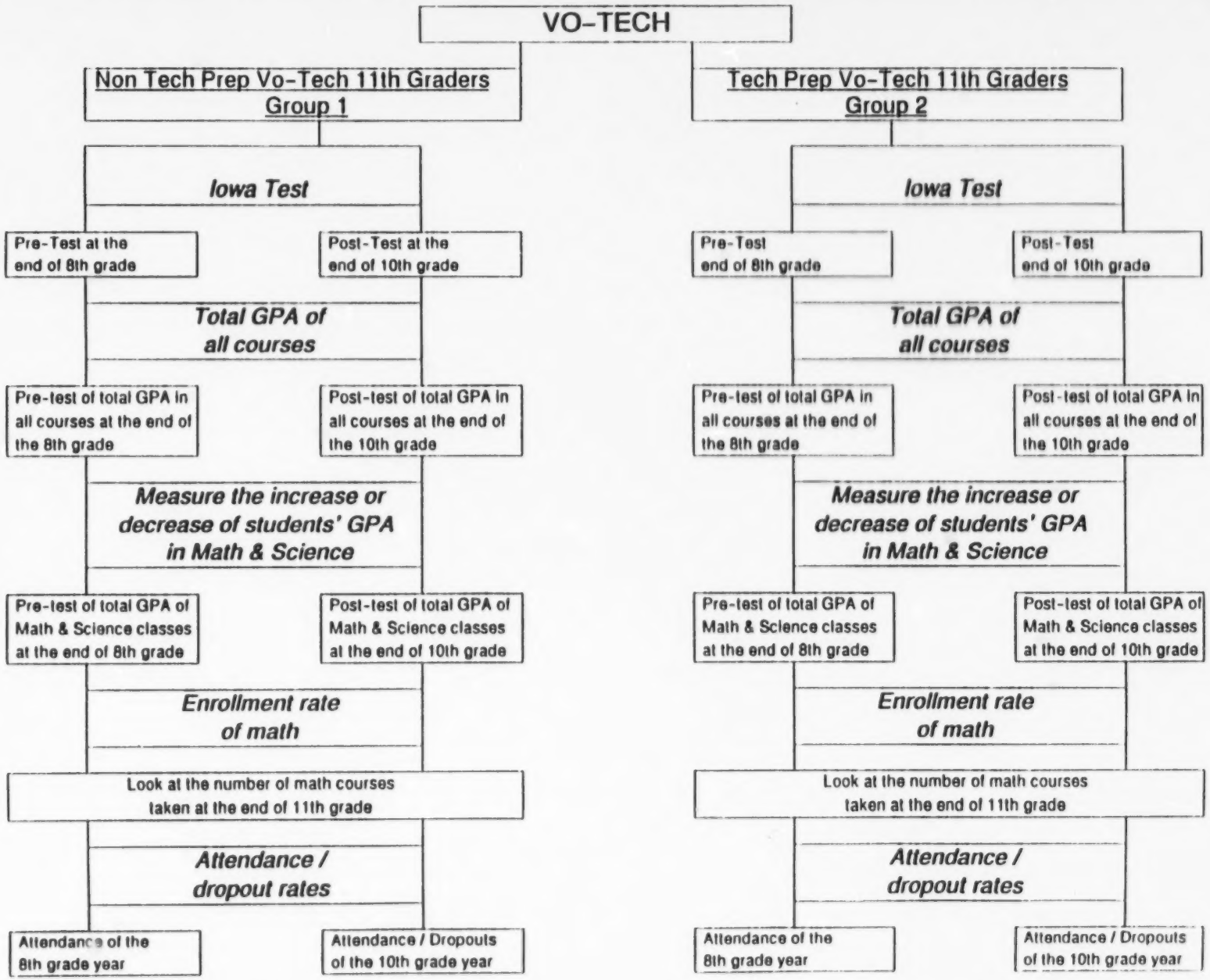
Telephone or mail-out surveys for teachers, counselors, students, committee members and parents will be conducted directly by the Tech Prep evaluator at OKCCC.

III. Evaluation Approach for the Students' Academic Achievement in Knowledge and Skills

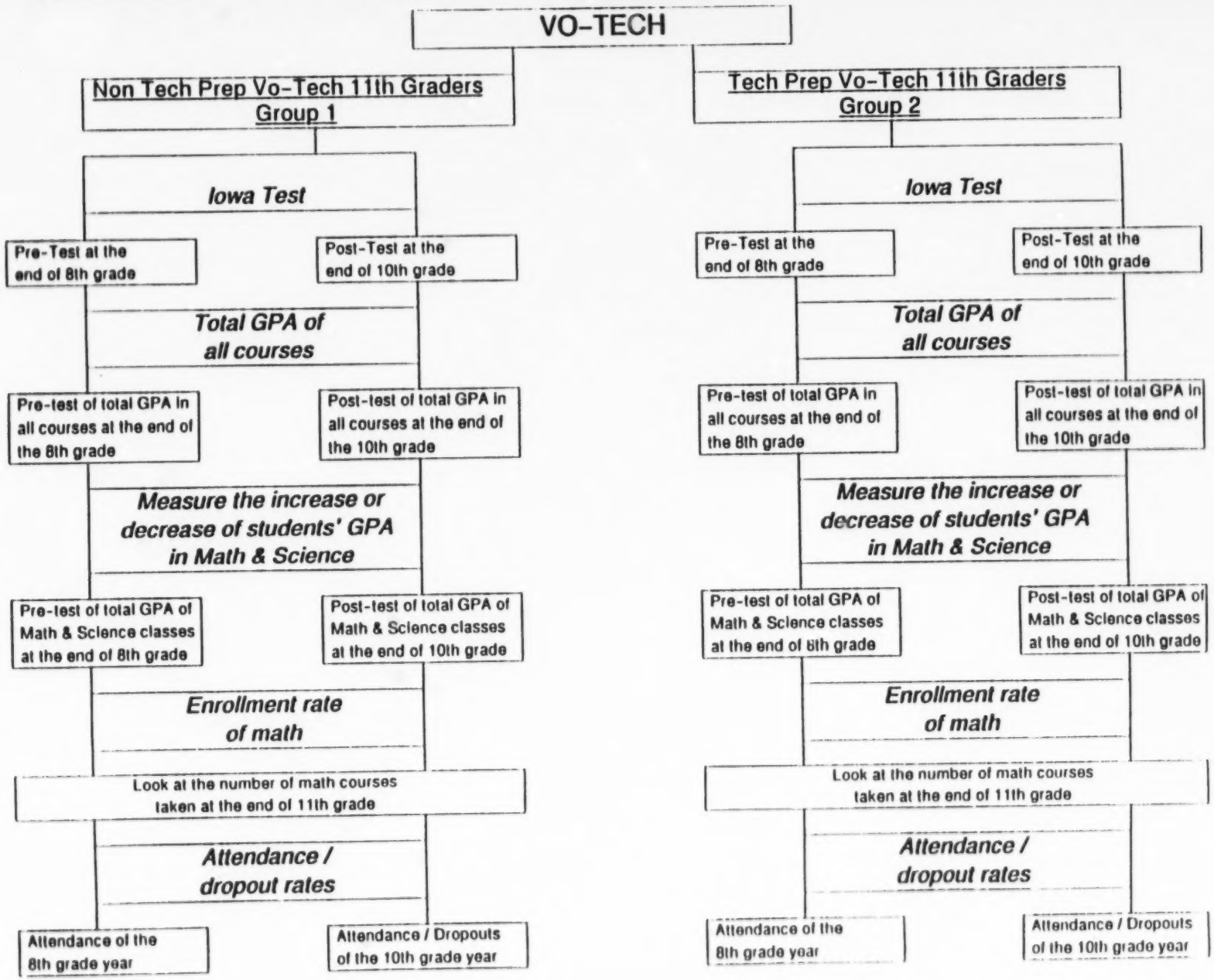
Objective 2: Evaluation of the Tech Prep Students' Academic Achievement in Knowledge and Skills

Performance Measures	Evaluation Design	Sample Selection	Instruments Used	Data Collection Procedures
A) Tech Prep Students' Academic Achievement in Knowledge and Skills 1. Iowa Test 2. Total GPA in all courses 3. GPA in math and science 4. Enrollment rate of math B) Tech Prep Students' Attendance \ Dropout Rates C) Critical Thinking Ability	See Experimental Evaluation Design for Students from Western Heights See Experimental Evaluation Design for Students from Edmond North Mid-High	Western Heights and Edmond North Mid-High are selected as the sample sites. Four groups will be tested: 1) Non Tech Prep Vo-Tech 11th graders from Western Heights 2) Tech Prep Vo-Tech 11th graders from Western Heights 3) Non Tech Prep Vo-Tech 11th graders from Edmond North Mid-High 4) Tech Prep Vo-Tech 11th graders from Edmond North Mid-High	Norm-referenced Iowa Test Purchase a test of Critical Thinking Ability (eg. Connell Critical Thinking Test Level X for 4-14 graders)	Students' records of total GPA of all courses, GPA in math & science courses, enrollment rate of math, attendance / dropout rates and critical thinking tests will be directly compiled by Tech-Prep evaluator from teachers and counselors at Western Heights High School and Edmond North Mid-High and from administrators at FTVTC as well. Iowa Test scores will be obtained from testing center. Collected data will be analyzed at OKCCC

EXPERIMENTAL EVALUATION DESIGN FOR WESTERN HEIGHTS STUDENTS


VO-TECH
Non Tech Prep Vo-Tech 11th Graders Group 1
Tech Prep Vo-Tech 11th Graders Group 2
Iowa Test
Pre-Test at the end of 8th grade
Post-Test at the end of 10th grade
Pre-Test end of 8th grade
Post-Test end of 10th grade
Total GPA of all courses
Pre-test of total GPA in all courses at the end of the 8th grade
Post-test of total GPA in all courses at the end of the 10th grade
Measure the increase or decrease of students' GPA in Math & Science
Pre-test of total GPA of Math & Science classes at the end of 8th grade
Post-test of total GPA of Math & Science classes at the end of 10th grade
Enrollment rate of math
Look at the number of math courses taken at the end of 11th grade
Attendance / dropout rates
Attendance of the 8th grade year
Attendance / Dropouts of the 10th grade year

EXPERIMENTAL EVALUATION DESIGN FOR EDMOND NORTH MID-HIGH STUDENTS


VO-TECH
Non Tech Prep Vo-Tech 11th Graders
Group 1
Tech Prep Vo-Tech 11th Graders
Group 2
Iowa Test
Pre-Test at the end of 8th grade
Post-Test at the end of 10th grade
Total GPA of all courses
Pre-test of total GPA in all courses at the end of the 8th grade
Post-test of total GPA in all courses at the end of the 10th grade
Measure the increase or decrease of students' GPA in Math & Science
Pre-test of total GPA of Math & Science classes at the end of 8th grade
Post-test of total GPA of Math & Science classes at the end of 10th grade
Enrollment rate of math
Look at the number of math courses taken at the end of 11th grade
Attendance / dropout rates
Attendance of the 8th grade year
Attendance / Dropouts of the 10th grade year

Training for CREATE Instructors
June 28, 1993

SBJCT	SBJCT2	TYPE OF TRAINING	DATE	HRS	DAYS
* Subsubtotal *				0	10.0
* TEACHER JEANETTE REICHARDT					
AM		AM WORKSHOP	07/16/91	0	2.0
AM		COOP LEARNING	02/10/92	6	0.0
AM		INSTRUCTOR WSHOP	06/22/92	6	0.0
AM		LEARNING STYLES	06/23/92	6	0.0
AM		INS/COUN WSHOP	06/24/92	6	0.0
AM		LEARNING STYLES	10/30/92	8	0.0
AM		COOP LEARNING WS	02/03/93	8	0.0
		STATE TP CONF	04/22/93	0	2.0
		IN-SERVICE WORKSHOP	06/03/93	0	2.0
* Subsubtotal *				40	6.0
* TEACHER JEFF BAKEL					
PT		COOP LEARNING	02/10/92	6	0.0
PT		INSTRUCTOR MTG	09/23/92	2	0.0
PT		LEARNING STYLES	10/29/92	4	0.0
PT		LEARNING STYLES	10/30/92	8	0.0
PT		INSTRUCTOR MTG	11/17/92	2	0.0
		INSTR. MTG.	03/02/93	0	0.0
		REGIONAL NCRVE	04/18/93	0	2.0
		STATE TP CONF	04/22/93	0	2.0
* Subsubtotal *				22	4.0
* TEACHER LAURA DISBROW					
AM		APPLIED MATH I	/ /	0	10.0
AM		AM WORKSHOP	07/16/91	0	2.0
AM		COOP LEARNING	10/23/91	0	6.0
AM		COOP LEARNING	02/10/92	6	0.0
AM		INSTRUCTOR WSHOP	06/22/92	6	0.0
AM		LEARNING STYLES	06/23/92	6	0.0
AM		INS/COUN WSHOP	06/24/92	6	0.0
AM		INSTRUCTOR MTG	08/21/92	2	0.0
AM		SOFTWARE TRAINING	09/08/92	2	0.0
AM		INSTRUCTOR MTG	09/23/92	2	0.0
AM		LEARNING STYLES	10/30/92	8	0.0
AM		INSTRUCTOR MTG	11/17/92	2	0.0
AM		INSTRUCTOR MTG	11/17/92	2	0.0
AM		LEARNING COOP WS	02/03/93	8	0.0
		INSTR. MTG.	03/02/93	0	0.0
		REGIONAL NCRVE	04/18/93	0	2.0
		STATE TP CONF	04/22/93	0	2.0
		IN-SERVICE WORKSHOP	06/03/93	0	2.0
* Subsubtotal *				50	24.0

TECH PREP
COMMITTEE EVALUATION

NAME: | **SCHOOL:**

COMMITTEE: ☐ Leadership ☐ Implementation ☐ Curriculum
☐ Student Services ☐ Public Relations ☐ Evaluation

1. ***Participation in this committee has helped me have a better understanding of the Tech Prep concept.***
☐ Strongly Agree | ☐ Agree | ☐ Disagree | ☐ Strongly Disagree | ☐ N/A

2. ***My input has been valuable to committee activities.***
☐ Strongly Agree | ☐ Agree | ☐ Disagree | ☐ Strongly Disagree | ☐ N/A

3. ***Committee meetings were productive and worthwhile.***
☐ Strongly Agree | ☐ Agree | ☐ Disagree | ☐ Strongly Disagree | ☐ N/A

4. ***The committee had the freedom to make decisions.***
☐ Strongly Agree | ☐ Agree | ☐ Disagree | ☐ Strongly Disagree | ☐ N/A

5. ***Committee members had the resources needed to overcome barriers to implementation.***
☐ Strongly Agree | ☐ Agree | ☐ Disagree | ☐ Strongly Disagree | ☐ N/A

6. ***My supervisor gave me the freedom to make decisions relating to the committee's activities.***
☐ Strongly Agree | ☐ Agree | ☐ Disagree | ☐ Strongly Disagree | ☐ N/A

7. ***Information presented in committee meetings helped me keep my co-workers informed.***
☐ Strongly Agree | ☐ Agree | ☐ Disagree | ☐ Strongly Disagree | ☐ N/A

8. ***The "committee approach" to implementing Tech Prep is more effective than an "administrative" approach.***
☐ Strongly Agree | ☐ Agree | ☐ Disagree | ☐ Strongly Disagree | ☐ N/A

9. ***My committee's activities and decisions have had a positive impact on the Tech Prep program.***
☐ Strongly Agree | ☐ Agree | ☐ Disagree | ☐ Strongly Disagree | ☐ N/A

10. ***I would like to continue on a Tech Prep committee next year.***
☐ Strongly Agree | ☐ Agree | ☐ Disagree | ☐ Strongly Disagree | ☐ N/A

11. ***In my opinion, the biggest barrier to the Tech Prep program is*** _____

12. ***Other comments*** _____

CREATE'S *TECH PREP APPRAISAL SURVEY*

Please help us improve our presentations. Tell us what you think.

SESSION:_____ **PRESENTER:**_____ **DATE**_____

1.

Please rate:	Excellent	Good	Fair	Poor
Materials used (handouts, textbooks, visual aids, etc.)				
Environment (room temperature, noise level, lighting, work space, seating, etc.)				
Organization of presentation				

2. Was the length of the session: ☐ Too Long ☐ Too Short ☐ About Right

3. Was this session worth the time? ☐ Yes ☐ No

   Comments:_____

4. Did the session meet your needs? ☐ Yes ☐ No

   Comments:_____

5. Would you recommend this to others? ☐ Yes ☐ No

6.

Please rate:	Excellent	Good	Fair	Poor
Presenter's enthusiasm				
Presenter's utilization of time				
Presenter's punctuality				
Presenter's preparation				

7. What future training/workshops would you like to see offered in the Tech Prep Program?

   _____ _____

   _____ _____

8. How can this Tech Prep presentation be changed to better fit your needs?

   Comments:_____

   _____

   _____

   _____

Thank you for taking time to give us your comments.

____ - ____ - ____
Date

CREATE'S *TECH PREP PRODUCT APPRAISAL SURVEY*

Please help us improve our materials. Tell us what you think.

Product/Material: _____

1. How did you request the product? ☐ Mail ☐ Telephone ☐ FAX ☐ Walk-in

2.

Please rate below:	Excellent	Good	Fair	Poor
Materials (handouts, textbooks, brochures, visual aids, etc.)				
Products				
Ordering Process				

3. How did you learn about the materials?
☐Workshop ☐Conference ☐Mail ☐Other_____

4. Was the material/product worth the price ? ☐ Yes ☐ No

Comments: _____

5. Did the product match the advertised description? ☐ Yes ☐ No

Comments: _____

6. Would you recommend the materials to others? ☐ Yes ☐ No

Comments: _____

_____

Please give us any other information concerning CREATE'S Tech Prep Materials.

Comments: _____

_____

_____

_____

CREATE'S TECH PREP STUDENT TRACKING FORM

School Name: _____

Program Name: _____

Instructor Name: _____

Number of student names submitted: _____

	Student's Name		Social		Class			Academically	Semester		Semester	
	First Initial	Last Name	Security Number See Back	Gender F or M	Level 1 or 2	Race See Back	Disability 0=No, Y=Yes	Disadvantaged 0=No, 2=Yes	GPA 1st	2nd	Attendance 1st	2nd
1												
2												
3												
4												
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RESOURCES

LOCAL

Ms. Judi Shelton, Counselor
Deer Creek High School
Route 1, Box 137
Edmond, Oklahoma 73003
(405) 348-5720

Ms. Kimberly Wilson, Career Counselor
Edmond Public Schools
Special Services Center
215 N. Boulevard
Edmond, Oklahoma 73034
(405) 340-2838

Ms. Linda Bailey, Math Coordinator
Putnam City Schools
5401 N.W. 40th Street
Oklahoma City, Oklahoma 73122
(405) 495-5200

Ms. Gwendolyn Jones, Counselor
Western Heights High School
8201 S.W. 44th Street
Oklahoma City, Oklahoma 73179
(405) 745-4623

Ms. Jan Powell, Chair
Instructional Services Division
Francis Tuttle Vo-Tech Center
12777 N. Rockwell
Oklahoma City, Oklahoma 73142-2789
(405) 720-4256

Ms. Carolyn Goad
Director of Cooperative Technical Education
Oklahoma City Community College
7777 South May Avenue
Oklahoma City, Oklahoma 73159
(405) 682-1611 Ext. 762

STATE

Ms. Linda Thompson
Tech Prep Coordinator
Oklahoma Department of Vocation and Technical Education
1500 West Seventh Avenue
Stillwater, Oklahoma 74074-4364
(405) 743-5115

(At the end of this section is a map showing the 10 funded Tech Prep consortia in the State of Oklahoma)

FEDERAL

Agency for Instructional Technology (AIT)
Box A
Bloomington, IN 47402-0120
(800) 457-4509
(812) 339-2203

American Association of Community Colleges
One Dupont Circle, N. W., Suite 410
Washington, D.C. 20036
(202) 728-0200

American Vocational Association
1410 King Street
Alexandria, VA 22314
(800) 826-9972
(703) 683-3111

Center for Occupational Research
and Development (CORD)
601C Lake Air Drive
P.O. Box 21689
Waco, TX 76702-1689
(800) 231-3015

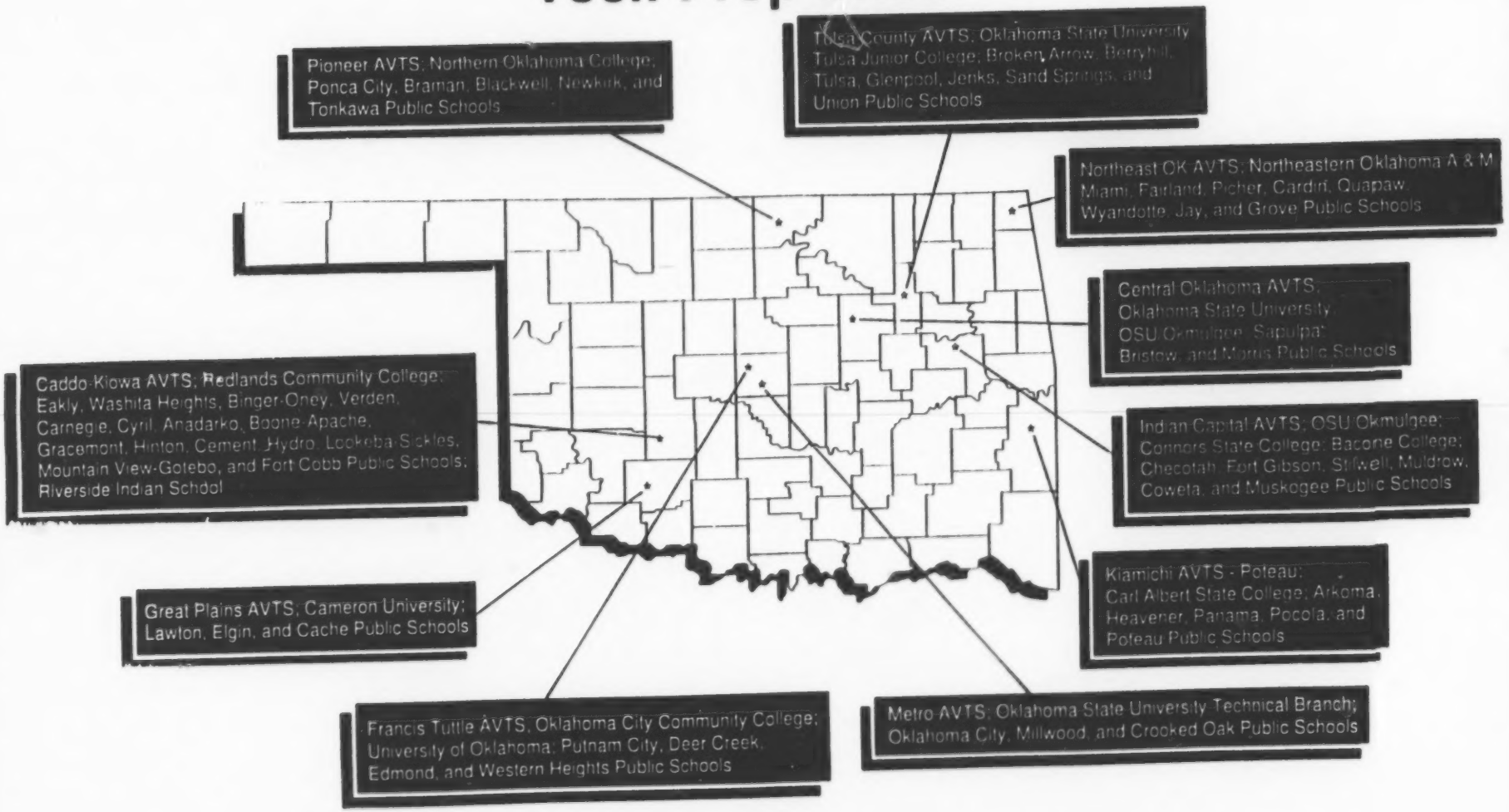
National Tech Prep Network Clearing House
East Central Region Curriculum
Coordinator Center
Sangamon State University, F-2
Springfield, IL 62794-9243
(800) 252-4822
(217) 786-6173

National Center for Research
in Vocational Education
University of California - Berkeley
1995 University Ave., Suite 375
Berkeley, CA 94704-1058
(800) 762-4093
(510) 642-4004

U.S. Department of Education
Office of Vocational and
Adult Education
330 C Street, N.W.
Washington, D.C. 20202
(202) 205-5451

U.S. Department of Labor
200 Constitution Avenue, N.W.
Room N6511
Washington, D.C. 20210
(800) 788-SKILL

Tech Prep Sites


Pioneer AVTS; Northern Oklahoma College; Ponca City, Braman, Blackwell, Newkirk, and Tonkawa Public Schools
Tulsa County AVTS; Oklahoma State University Tulsa Junior College; Broken Arrow, Berryhill, Tulsa, Glenpool, Jenks, Sand Springs, and Union Public Schools
Northeast OK AVTS; Northeastern Oklahoma A & M Miami, Fairland, Picher, Cardin, Quapaw, Wyandotte, Jay, and Grove Public Schools
Central Oklahoma AVTS; Oklahoma State University, OSU Okmulgee, Sapulpa, Bristow, and Morris Public Schools
Caddo-Kiowa AVTS; Redlands Community College; Eakly, Washita Heights, Binger-Oney, Verden, Carnegie, Cyril, Anadarko, Boone-Apache, Gracemont, Hinton, Cement, Hydro, Lookeba-Sickles, Mountain View-Gotebo, and Fort Cobb Public Schools; Riverside Indian School
Indian Capital AVTS; OSU Okmulgee; Connors State College; Bacone College; Checotah, Fort Gibson, Stilwell, Muldrow, Coweta, and Muskogee Public Schools
Kiamichi AVTS - Poteau; Carl Albert State College; Arkoma, Heavener, Panama, Pocola, and Poteau Public Schools
Great Plains AVTS; Cameron University; Lawton, Elgin, and Cache Public Schools
Francis Tuttle AVTS; Oklahoma City Community College; University of Oklahoma; Putnam City, Deer Creek, Edmond, and Western Heights Public Schools
Metro AVTS; Oklahoma State University Technical Branch; Oklahoma City, Millwood, and Crooked Oak Public Schools

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(2) American Society of Training and Development, 1992.

(3) "Every Student a Winner; How Tech Prep Can Help Students Achieve Career Success, Dale Parnell, Vocational Education Journal, April 1992.

(4) AVA Guide to Funding Tech Prep, Michael Brustein, American Vocational Association, Inc., 1993.

(5) "Steps Involved in the Articulation Process", Articulation Handbook, Oklahoma Department of Vocational Technical Education, 1993.

(6) Mishawaka Demonstration Site Handbook, Steve Clason, 1992.

(7) Partners in Progress Director's Handbook, Partnership for Academic and Career Education, 1993.

(8) "Mississippi's Career Advancement Program for Vocational-Technical Educators", Mississippi State Department of Vocational and Technical Education, 1992.

(9) "Illinois Tech Prep Planning Strategies", Illinois State Board of Education, Adult, Vocational and Technical Education, 1991.